

# Exhibit X

UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA

IN RE: CENTURYLINK SALES )  
PRACTICES AND SECURITIES )  
LITIGATION )  
MDL NO.  
17-2795 (MJD/KMM)  
THIS DOCUMENT RELATES TO: )  
CIVIL FILE NO. 18-296 (MJD/KMM) )

REMOTE PROCEEDINGS OF THE  
VIDEOTAPED EXPERT DEPOSITION OF BRUCE DEAL  
FRIDAY, APRIL 24, 2020

REPORTED BY KIMBERLY EDELEN,  
CSR. NO. 9042, CRR, RPR.

1 REMOTE PROCEEDINGS OF THE VIDEOTAPED EXPERT  
2 DEPOSITION OF BRUCE DEAL, TAKEN ON BEHALF OF THE  
3 PLAINTIFF AND THE CLASS, AT 9:06 A.M., FRIDAY,  
4 APRIL 24, 2020, BEFORE KIMBERLY A. EDELEN, C.S.R.  
5 NO. 9042, CRR, RPR.

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## I N D E X

WITNESS	EXAMINATION	PAGE
BRUCE DEAL	BY MR. BLATCHLEY	7

## E X H I B I T S

NO.	PAGE	DESCRIPTION
EXHIBIT 30	5	EXPERT REPORT OF BRUCE DEAL
EXHIBIT 31	200	BLOOMBERG ARTICLE DATED 6-19-2017, BATES NOS. CTLDEAL00005591 - CTLDEAL00005592

1 FRIDAY, APRIL 24, 2020;

2 9:06 A.M.

3

4

5 (Deposition Exhibit 30

6 was marked for identification.)

7 THE VIDEOGRAPHER: Good morning. We are

8 going on the record at 9:06 a.m. on April 24th,

9 2020.

10 This is Media Unit No. 1 in the video

11 recorded deposition of Bruce Deal taken by counsel

12 for plaintiff in the matter -- in re: of the

13 CenturyLink Sales Practices and Securities

14 litigation filed in the United States Federal Court,

15 District of Minnesota.

16 This deposition today is being held via the

17 Veritext Virtual deposition platform. My name is

18 Troy Johnson. I'm from the firm Veritext. I am

19 your videographer. Our court reporter today is

20 Kimberly Edelen, also from the firm Veritext.

21 I am not related to any party in this

22 action nor am I financially interested in its

23 outcome.

24 Now, Counsel, can you please introduce

25 yourselves and state whom you represent.

1 MR. BLATCHLEY: Good morning. This is  
2 Michael Blatchley from Bernstein Litowitz Berger &  
3 Grossmans on behalf of plaintiffs.

4 MR. MATHAI: Good morning. This is  
5 Michael Mathai also from Bernstein Litowitz Berger &  
6 Grossmann also on behalf of plaintiffs.

7 MR. MUELLER: Good morning. This is  
8 Keil Mueller with Stoll Stoll Berne Lokting &  
9 Shlachter on behalf of plaintiffs.

10 MR. BLAIR: Good morning. My name is  
11 Ryan Blair with the firm of Cooley LLP on behalf of  
12 defendants and the witness.

13 MR. MARTIN: Chris Martin of Cooley LLP on  
14 behalf of the defendants.

15 MS. MUNLEY: Caitlin Munley with Cooley LLP  
16 on behalf of defendants.

17 THE VIDEOGRAPHER: Okay. If that was  
18 everyone, now can our court reporter please do her  
19 read on and swear in the witness.

20 THE REPORTER: Do the parties stipulate  
21 that the court reporter may swear in the witness  
22 remotely?

23 MR. BLATCHLEY: We do for plaintiffs.

24 MR. BLAIR: We do, defendants as well.

25 \\\

1 BRUCE DEAL,  
2 having been first duly sworn by the reporter, was  
3 examined and testified as follows:

4 THE WITNESS: I do.

5 THE VIDEOGRAPHER: Okay. You may proceed,  
6 Counsel.

7  
8 EXAMINATION

9 BY MR. BLATCHLEY:

10 Q Thank you, everyone. And thank you,  
11 Mr. Deal, for bearing with us on the -- on the  
12 technical aspects and making yourself available  
13 remotely. I really do appreciate it. I know how  
14 difficult at times it is for everyone, so thank you  
15 for doing this and being here.

16 If I could, can I get you again to state  
17 your full name for the record.

18 A Sure. It's Bruce Deal, B-r-u-c-e, last  
19 name Deal, D-e-a-l.

20 Q And provide your home address, please.

21 A Home address is 98 Hawthorne Drive,  
22 Atherton, California 94027.

23 Q So, Mr. Deal, I know you're an experienced  
24 deposition witness, but I want to just, again,  
25 because we're remote deposition, quickly just go



1 over a couple ground rules.

2 As in every deposition, especially with  
3 kind of the remote aspect here, please let me know  
4 if you don't understand a question and I'll try to  
5 rephrase it. I'll repeat it or clarify it.

6 Is that -- is that an okay way to proceed?

7 A Yes. That's fine.

8 Q And, of course, if I ask a question and you  
9 answer it, I'm going to, you know, assume that  
10 you've understood it. Is that -- is that fair?

11 A Yes. That's fine.

12 Q And I know you were just sworn in, and  
13 although it's a remote deposition, you understand  
14 that you're truthfully and fully to answer all  
15 questions asked of you on the record unless your  
16 counsel tells you -- instructs you not to answer  
17 them.

18 Is that -- do you agree with that?

19 A I do agree with that, yes.

20 Q And as you sit here today, is there any  
21 reason you are not able to testify truthfully?

22 A No. This is fine.

23 Q And, again, given the remote nature of the  
24 deposition, you know, we'll try not to speak over  
25 each other. And, again, we're going to need audible

1 answers for the -- for the court reporter.

2 And then, again, if you need a break, just  
3 let us know. But, again, let's make sure we've got  
4 a question and answer fully done before we take any  
5 breaks.

6 Is that -- does that sound good?

7 A Yes. That's fine.

8 Q Okay. And then just two other, you know,  
9 points just before we get going. Given that it's a  
10 remote deposition, I know there's a lot of  
11 electronic devices and cell phones. I would just  
12 ask that you not communicate with your counsel or  
13 with anyone else while we're on the record on any  
14 device or anything like that.

15 Is that something you can agree to?

16 A Yes. That's totally fine.

17 Q Okay. Good.

18 And then as well we discussed earlier  
19 that -- I don't know if you did. Did you print out  
20 a hard copy of your report?

21 A That's correct. The only thing I have with  
22 me, in addition to a blank piece of paper, is a hard  
23 copy of my report.

24 Q Okay. And we've marked that prior to  
25 getting on the -- on the record as Exhibit 30. And

1 I'd just ask you to represent that the document that  
2 you are -- the hard copy document is exactly the one  
3 that is reflected in Exhibit Share as Exhibit 30,  
4 that you have not made any, you know,  
5 previously-recorded notations or differences between  
6 those two documents?

7 A Yes. Obviously -- I'm opening the Exhibit  
8 Share one now. I haven't gone through every single  
9 page of it but it certainly has every appearance to  
10 be my report, and I haven't made any modifications  
11 to the report since it was filed.

12 Q Great. Okay. Well, thanks so much for  
13 that.

14 So just getting started, you're here  
15 testifying today as an expert witness on behalf of  
16 the defendant; is that -- is that right?

17 A Yes. That's correct.

18 Q And who are you retained by?

19 A I was retained by the firm of Cooley.

20 Q Okay. And you served as an expert witness  
21 in other matters; is that right?

22 A Many times, yes.

23 Q How many times?

24 A Have I been retained as an expert? Oh,  
25 maybe a hundred, something like that. I mean, a

1 lot. Maybe more.

2 Q How many times have you been deposed as an  
3 expert?

4 A Probably between 1- and 200 times.

5 Q And so -- so -- sorry. Between a hundred  
6 and 200 times being deposed as an expert?

7 A My best approximation, yes.

8 Q Okay. And so you're an experienced expert  
9 witness; is that accurate?

10 A I think that's fair to say, yes.

11 Q Okay. So turning again to this expert  
12 report you submitted in this case, which we've  
13 marked as Exhibit 30.

14 Can you please turn to Page 108.

15 A Okay.

16 Q And you see your signature there?

17 A Yes.

18 Q And that's your signature; is that correct?

19 A It is, yes.

20 I'm just looking at the exhibit here. I'm  
21 assuming it's the same. I'm looking at my hard copy  
22 one.

23 Do you -- I don't want to make this  
24 awkward. I'm fine just looking at the paper copy  
25 and referencing your questions if you're fine with

1 that as opposed to just confirming everything on the  
2 electronic copy.

3 Q Yeah. I think whatever is easiest for you,  
4 Mr. Deal, is the way we should proceed. And I'll  
5 trust that the two documents match -- match each  
6 other, and I'm sure we'll find out if that's not the  
7 case as we go along. Is that fair?

8 A That's fair. I did just verify that and  
9 they both are my signature and they seem to be  
10 identical, so that's a good little test.

11 Q That's great.

12 And you submitted this -- your  
13 declaration -- I'm sorry, your expert report in  
14 connection with plaintiffs' motion for class  
15 certification; is that right?

16 A Well --

17 MR. BLAIR: Object to the question.

18 THE WITNESS: -- my only hesitancy is I'm  
19 not the one that submitted the motion for class  
20 certification or the response to the motion. I  
21 believe it was served with the response to the  
22 motion for class certification, but that was  
23 something that counsel provided.

24 BY MR. BLATCHLEY:

25 Q Defendant's opposition, correct?

1           A       I'm sorry. What was that?

2           Q       I think we're in agreement, you submitted  
3 it in connection with defendant's opposition to  
4 plaintiffs' motion for class certification?

5           A       In connection, yes.

6           Q       Do you have a retention agreement with  
7 Cooley or how did that work?

8           A       Well, certainly we have a retention. I  
9 think your question is do I have a written retention  
10 agreement, which I don't know the answer to that.  
11 We may. One of my colleagues handles the  
12 administrative part of that.

13          Q       Okay. So it's not personally with you,  
14 it's with someone else?

15          A       Well, it would be with Analysis Group, our  
16 firm.

17          Q       Perfect.

18                   And can you just describe for me your  
19 relationship with the Analysis Group.

20          A       Yes. I'm a managing principal with  
21 Analysis Group, which is essentially a partner at  
22 the firm. We're technically a C corporation, so  
23 it's not a partnership. I'm an employee of Analysis  
24 Group, but I'm also one of the owners and the  
25 managing principal.

1 Q Okay. And so it wasn't just you who worked  
2 on your report; is that right?

3 A That's accurate.

4 Q Okay. And there are other individuals who  
5 contributed to the preparation of the report?

6 A Yes.

7 Q And who are those individuals?

8 A So the two -- there's two primary  
9 individuals and then they supervised others as well,  
10 so Peter Hess, H-e-s-s, and Nishi Sinha, S-i-n-h-a,  
11 I believe.

12 Q Okay. And who did they -- you said they  
13 supervised other individuals. Who did they  
14 supervise?

15 A I don't recall off the top of my head the  
16 entire list. I know there's Tom Polly, Xin Gao,  
17 Daniel Bennett, Brett Bowersox. There may be others  
18 as well. I'm just not recalling.

19 Q Okay. And I apologize. So did you oversee  
20 the work of Peter Hess and Nishi Sinha?

21 A I did, yes.

22 Q And what were their roles specifically if  
23 you could describe those for me in connection with  
24 this report.

25 A Certainly. So in an effort like this

1 certainly it's very typically like this, it requires  
2 a team, it's all done under my direction. But in  
3 terms of the -- many of the analyses, so pulling the  
4 data, writing some of the code, developing some of  
5 the exhibits and spreadsheets, those sorts of  
6 things, the drafting is all done under my direction.

7 I sometimes have them write a summary of  
8 their findings and data, and then I convert that  
9 into part of my expert report in the text in my  
10 expert report. But essentially implementing the  
11 analyses that I want to have done as part of my  
12 report.

13 Q So who did -- who wrote the first draft of  
14 the report?

15 A I did.

16 Q Okay. And that first draft, did that  
17 include all of the analyses that are contained  
18 within it right now?

19 MR. BLAIR: Object to the form.

20 THE WITNESS: I don't recall specifically.  
21 I certainly don't recall anything that wasn't in the  
22 first draft but -- so obviously these things, you  
23 know, evolve. There's a lot of different exhibits  
24 and analyses and things like that, so -- but I don't  
25 recall anything that wasn't in the first draft.



1 BY MR. BLATCHLEY:

2 Q And if you look at I guess the document  
3 that you have before you, just to confirm for the  
4 record, is this the entirety of your report and the  
5 exhibits and appendices that, you know, existed at  
6 the time you signed the document?

7 A Yes. Just to be clear, I think you're  
8 referring to the -- I think it's a 399-page PDF, so  
9 it's got my report and quite a number of exhibits.  
10 And that is the -- the report and the exhibits  
11 together do comprise the report, and nothing has  
12 changed since the filing of that report.

13 I believe there was some -- included in  
14 there is the documents considered, along with the  
15 documents considered, and I believe that backup has  
16 all been provided to you, so obviously the report  
17 itself doesn't literally have copies of everything  
18 in it. That would be thousands of pages, but I  
19 think that's all been provided to you as well. And  
20 the documents considered list is part of my report.

21 Q And the documents considered list, again,  
22 just to clarify, includes all of the documents that  
23 you relied upon in -- or expressly mentioned  
24 elsewhere in your report in producing your opinions  
25 in this case?

1           A       That's correct.

2           Q       Okay. And so the report, this 399-page  
3 document, they contain the complete statement of all  
4 the opinions that you will express concerning class  
5 certification in this case?

6           A       Yes. That's correct.

7           Q       And it contains a complete statement of all  
8 of the bases and reasons for the opinions you will  
9 express in this case in connection with class  
10 certification?

11          A       Yes.

12               MR. BLAIR: Objection. Form.

13               THE WITNESS: I think that's right.

14               I'm sorry. Ryan, were you objecting? I  
15 may have misspoken.

16               MR. BLAIR: That's fine. Go ahead.

17               THE WITNESS: Yes, subject to my statement  
18 a moment ago that the backup, which included some of  
19 the calculations, things like that, is also  
20 obviously the bases for my opinions. But between  
21 the report and the backup, that is the complete  
22 bases of my opinions.

23 BY MR. BLATCHLEY:

24          Q       Do you intend to offer any opinions that  
25 are not in your report?

1           A     As I sit here right now, I'm not aware of  
2     anything. In my experience, to the extent, for  
3     instance, there might be a rebuttal report or some  
4     other analysis, I could be asked to review those,  
5     but as of now I have not and I don't have any plans  
6     right now to do anything.

7           Q     Sitting here today, that report contains  
8     all of the opinions you intend to offer with the  
9     qualification you just mentioned in connection with  
10    class certification, right?

11          A     That's accurate.

12          Q     And then are there any, you know, bases or  
13    reasons for your opinions other than those set forth  
14    in your report?

15               MR. BLAIR: Object to the form.

16               THE WITNESS: I think the answer is no  
17    other than, you know, on some level that's a very  
18    general question and I refer somewhere in the report  
19    to my experience and expertise.

20               I've been doing this a long time, so  
21    certainly I have a lot of general knowledge that  
22    goes into it, but I think I've referenced that in  
23    the report, so -- and, again, there's certainly not  
24    anything -- any factual information or, you know,  
25    spreadsheets, things like that that are a part of my

1 opinion that are not included in the report and the  
2 backup materials.

3 BY MR. BLATCHLEY:

4 Q Okay. And, again, I think that gets to my  
5 next question. All of the analyses that you  
6 considered in connection with your opinions on class  
7 certification and preparing the report are described  
8 in the report itself; is that right?

9 A Again, I think it would be the same answer  
10 in the sense that there's quite a number of exhibits  
11 that are in the report that are attachments to the  
12 report. And those, again, are incorporated sort of  
13 by reference to my overall opinions.

14 And there's the backup that goes with each  
15 of those that's been provided that would provide  
16 some of the specific calculations and things like  
17 that. But between the report and the backup, I  
18 think that does form the totality of the bases for  
19 my opinion.

20 Q So sitting here today, do you agree with  
21 everything that's written in your report?

22 A I -- I do.

23 I'm showing a frozen screen. I don't think  
24 that matters to me.

25 Q Yeah. My screen is frozen, too. Are you

1     okay --

2           A     I'm fine continuing with a frozen --

3           Q     Okay.

4           A     -- screen. I'm not sure I offer a lot with  
5     my -- my view anyway.

6           Q     Well, let's keep going. Hopefully it will  
7     fix itself and then if -- you know, we can revisit  
8     if it doesn't, if that's okay.

9           A     Yeah. That's totally fine. I'm fine.  
10    Again -- anyway, yes, that's totally fine.

11          Q     Okay.

12          A     I lost track of your question. Do you mind  
13    repeating it?

14          Q     Yeah. So the question is do the opinions  
15    in the report -- you agree with everything you've  
16    written in your report sitting here today, correct?

17          A     I do, yes.

18          Q     They're still your opinions, those that are  
19    expressed in the report?

20          A     Yes. That's accurate.

21          Q     And they haven't been changed or modified  
22    in any way since you signed the report?

23          A     That -- that's correct.

24          Q     And you believe everything in the report is  
25    stated accurately; is that right?

1           A       With one incredibly minor clarification. I  
2 noticed as I was reviewing it -- I don't even recall  
3 off the top of my head exactly what it was. One of  
4 my footnotes I had referenced three things in the  
5 text and the footnote referenced one of them. The  
6 other two are part of my documents considered as  
7 well, but the footnote didn't actually include the  
8 references to the other two.

9                   I believe they were analysts reports, so I  
10 realize I'm way down in the weeds now but I noticed  
11 that in the spirit of your question. That's the  
12 only thing I noticed.

13           Q       No. That's -- that's very helpful.  
14                   Do you recall what footnote that is or  
15 what --

16           A       I don't.

17           Q       -- what topic it was on?

18           A       I don't.

19                   Sorry. I think now we're coming back up  
20 here. Let me just click on this. Okay. I'm back  
21 up.

22           Q       Yeah.

23           A       Yeah. I don't recall off the top of my  
24 head. I can tell you it was -- to the best of my  
25 recollection, it was where I was discussing some of

1 the analysts reports, the securities analysts  
2 reports and some of the content, and it was a  
3 footnote that in the text I had referenced oh, these  
4 three analysts had said this or said something like  
5 this, and then I looked at the footnote and it only  
6 had one reference in it.

7 So you could probably find it. I could  
8 find it. I don't suspect it's worth looking at  
9 right now, but if that helps it gives a little  
10 context for you.

11 Q No. Yeah. That's helpful and it sounds  
12 like we should -- do you remember what -- you know,  
13 was it concerning your opinions on the corrective  
14 disclosures or some other area?

15 A That's my recollection, is it was the  
16 corrective disclosure discussion, which is where I  
17 have most of the discussion of securities analyst.  
18 So I believe it was --

19 Q Okay.

20 A -- in that section, yeah.

21 Q Okay. Is it -- I guess if we get to it  
22 today, let's just try to flag it.

23 A Yeah. If I -- if we're on that page and I  
24 see it, I'll try -- if I recall. It's not an error  
25 so much as I just didn't include the specific

1 references. I think it's actually pretty clear from  
2 the discussion and the docs considered, but I'll try  
3 and remember if we get to it.

4 Q Okay. And so just to kind of move along,  
5 you know, setting that footnote aside, is there  
6 anything else in the report that you would change or  
7 amend sitting here today?

8 A No.

9 Q Okay. And that's true with respect to the  
10 appendices and the exhibits, correct?

11 A Yes. That's correct.

12 Q Do you think you had all of the information  
13 you needed to complete your report?

14 A Yes.

15 Q Was there anything that you tried to  
16 obtain, any material you tried to obtain in  
17 completing your report that were not provided to  
18 you?

19 A No.

20 Q Okay. So if you -- if you go -- you don't  
21 have to go there, but you reference in Paragraph 29  
22 of the report that you reviewed documents and other  
23 materials provided to you by CenturyLink or obtained  
24 from public sources, and those include  
25 Dr. Hartzmark's report, CenturyLink's SEC filings,



1 analyst reports, news articles, academic research,  
2 legal documents and other -- you know, I guess  
3 Dr. Hartzmark's production.

4 Is that an accurate statement of the  
5 materials that you relied on in connection with this  
6 report?

7 A Yes. Although I would include that last  
8 sentence as well just to say that Appendix B is  
9 literally the listing of --

10 Q Right.

11 A There's several hundred items on that list.  
12 So to the extent -- I'm not aware of any topics or  
13 categories being left off of that list, but if  
14 there's something on Exhibit -- or Appendix B that  
15 doesn't fit nicely into one of those categories, it  
16 should also be included.

17 Q So just so I'm clear, how did you go about  
18 selecting those -- those materials?

19 A Well, when you say "those materials," are  
20 you referring to --

21 MR. BLAIR: Objection to form.

22 THE WITNESS: -- Appendix -- I'm sorry.

23 Yeah.

24 I think that objection made it on the  
25 record, but do you want to state it again, Ryan?

1 MR. BLAIR: Yeah, it did. Just object to  
2 the form. Vague.

3 THE WITNESS: Yeah.

4 I'm assuming you're referencing the  
5 totality of Appendix B?

6 BY MR. BLATCHLEY:

7 Q Sure. Let's start there.

8 A All right. We could start and end there  
9 probably. That's all of the documents.

10 You know, certainly, I think your question  
11 was how did I select them or why did I select them;  
12 is that right?

13 Q Yeah. How did you go about selecting them?

14 A Yeah. So it depends on the -- on the type  
15 of document and the -- the use of the document, so  
16 I'm not -- there's not just a simple answer to that  
17 question.

18 I mean, for instance, obviously  
19 Dr. Hartzmark's report is the primary report that  
20 I'm rebutting and analyzing so, of course, that  
21 would be the natural basis for my work.

22 I think, if I'm understanding your  
23 question, it's more general to say well, things  
24 like, you know, the data sources you cite and those  
25 kind of things.

1           So, again, that really depends on the  
2 overall framework for the report and the types of  
3 analyses that I want to do. So to give you an  
4 example, for the event study, the equity event  
5 study, obviously we need equity prices, we need  
6 indices for that, we need to identify dates that  
7 various events happened, so it's a combination of  
8 the complaint, it's a combination of pulling data  
9 from data sources, things like that.

10           Other analyses, for instance, that we might  
11 be looking at, you know, analysts reactions, for  
12 example, so we're saying hey, we want to look at  
13 price reaction to this in terms of target prices.

14           We look at our standard sources, IBIS and  
15 others to say well, what's being reported in terms  
16 of price targets and changes over time. So, again,  
17 it really varies depending on the analyses.

18           I would say, you know, high level,  
19 reviewing Dr. Hartzmark's report, developing my --  
20 my broad categories of analysis and response, and  
21 then developing the specific types of analyses that  
22 I want to do, and then figuring out what's the right  
23 data that's needed to analyze each of those.

24           So I think that's hopefully responsive to  
25 your question. Again, it's not just a super simple

1 question.

2 Q Understood.

3 And so you read the Complaint that the  
4 plaintiffs filed in this case, correct?

5 A I have, yes.

6 Q And you relied on it in completing your  
7 analysis and producing your report?

8 A I did. Hang on one second, though. I just  
9 want to make sure -- when the Zoom reset, I just  
10 want to make sure I've got the Exhibit Share up. It  
11 looks like it is up.

12 I think the -- I know you just asked me  
13 this but just so I'm straight, I think Exhibit 1 is  
14 the Complaint in the -- in the document, and I have  
15 read it and I have referenced it in my report, and  
16 I'm certainly relying on it to the extent I cite it.  
17 And Dr. Hartzmark himself has cited it to some  
18 extent or at least relied on it, focused on it, so I  
19 used it in those contexts.

20 Q And it was an important document in  
21 consideration -- in coming up with your opinions in  
22 the report, correct?

23 MR. BLAIR: Object to the form.

24 THE WITNESS: It was an important document,  
25 I think, yes, in the sense that it was important for

1 me to understand -- which I go into quite a bit of  
2 detail on in my report. It was important for me to  
3 understand exactly what the allegations are,  
4 especially with regards to particular dates.

5 So as I refer to in the report there are 52  
6 dates where there's a potential market impact that  
7 are alleged to be inflationary. I believe there's  
8 55 total days there, but some of them happened after  
9 4:00 so it affects fewer than 55 days, so I needed  
10 to understand that, what are the dates that are  
11 alleged to be inflationary.

12 I needed to understand what categories of  
13 harm that are alleged. There were five categories.  
14 I obtained those from the Complaint.

15 I discussed the fact that there's this  
16 intermediate period that I understand the  
17 plaintiffs, you have identified as being a low or no  
18 cramming period in the middle of the class period.  
19 I needed to understand that and analyze that.

20 I needed to look at the corrective -- the  
21 supposedly corrective disclosures to understand both  
22 what days they are and what is alleged to have  
23 occurred on those days, so look at the substance of  
24 those, which, of course, I discuss at some length in  
25 my report.

1           So I'd say those are, you know, kind of at  
2   least the primary areas that I rely on for the  
3   Complaint. There certainly may be other citations  
4   and things like that, but clearly I am directly  
5   relying on the Complaint for those types of things.

6   BY MR. BLATCHLEY:

7           Q     So let me just take those kind of in turn.  
8   So you said that --

9           A     By the way, it doesn't really matter too  
10  much, although I'd prefer if I could see you on  
11  video and I'm not seeing that right now, I think,  
12  unless I'm missing it. I don't know what's happened  
13  on the video here.

14                  Let me see if I can -- maybe I can find --  
15  there we go. You were just -- somehow when it reset  
16  you scrolled off to the side there but I can see you  
17  now, so, okay.

18           Q     Yeah. I'm able on my end -- I've got you  
19  with a green highlight around you, and you're the  
20  only person who's popped up. If you could do the  
21  same for me, I think that's --

22           A     I can see you. It's fine now. I can see  
23  you and Ryan, who are probably the people that are  
24  most important to see, the person doing the  
25  objection and the person asking the question so I

1 think we're fine.

2 Q Okay. Great.

3 So just going through those items that you  
4 mentioned, you said the dates were important. And I  
5 think you were referencing the dates that the  
6 alleged misstatements and omissions were made; is  
7 that -- is that right?

8 A There's really two categories of dates I  
9 would say. I don't disagree with what you just  
10 said. The 55 days, the 52 equivalent days where  
11 there's going to be a market reaction to those,  
12 those are what I called the inflationary or the  
13 front end days, and I do obtain those from the  
14 Complaint.

15 Q And it was important to make sure that your  
16 analysis reflected the allegations concerning those  
17 events and those dates in the Complaint; is that  
18 right?

19 MR. BLAIR: Object to the form.

20 THE WITNESS: Yeah. I think the answer is  
21 yes to that, but let me give a little color on that,  
22 if I understand your question.

23 I would say a couple things. One is  
24 certainly identifying what those days were was  
25 important, literally like what date it is.

1           As I say in my report, I then analyzed --  
2   many of them are earnings days, not all of them, but  
3   many of them are. So it's important for me to  
4   understand the allegations of these broadly, but  
5   also to think about the other types of information  
6   that was also made public on those days. And I've  
7   done an analysis to look at how many different  
8   metrics were discussed on many of those days.

9           You'll probably recall that I also did do  
10   at least a -- I would call it a preliminary analysis  
11   of the days and trying to map that at least, again,  
12   preliminarily and broadly to the allegations, the  
13   five categories of allegations.

14           That's not something that plaintiffs had  
15   done directly. I think it's something that would  
16   need to be done. And I was doing it as an attempt  
17   to illustrate that there's a complex interaction of  
18   the days and the allegations in the report.

19           So that was something that I did but it was  
20   important for me to understand the days and the  
21   allegations. And as I just noted, also to  
22   understand what other things were identified on  
23   those days.

24   BY MR. BLATCHLEY:

25           Q     So let me -- let me just take that.



1           So you said first that it was important --  
2     the report that you provided, is this -- are you  
3     referencing I guess it's Figure 5 or the analysis  
4     that was done with respect to, I think what you  
5     labeled the 52 inflationary dates or events?

6           A     Do you have a page number on that? I know  
7     my pages are referenced numerically, but -- here we  
8     go. I've got it. Never mind.

9           Page 41, yeah, it's quite small print,  
10    which used to be fine until many years ago when I  
11    turned 42, and then the eyes decided they weren't  
12    going to be quite as cooperative.

13           But, yes, Figure 5 was that mapping that I  
14    had discussed a few minutes ago.

15           Q     And you mentioned that this was just a  
16    preliminary analysis; is that right?

17           A     Yeah. I would call it kind of  
18    illustrative. And my -- so it's not intended to be  
19    the final. I think it's really illustrative of the  
20    work that has not been done by Dr. Hartzmark or by  
21    plaintiffs that would need to be done. And really  
22    to illustrate the complexity and the interactions of  
23    these various things.

24           Q     Got it.

25           Okay. So, again, what you're doing with

1 that Figure 5 and the surrounding discussion is  
2 really suggesting what Dr. Hartzmark should have  
3 done; is that right?

4 MR. BLAIR: Object to the form.

5 THE WITNESS: I'd say sort of. I mean, as  
6 I say repeatedly, Dr. Hartzmark hasn't done anything  
7 on the inflationary dates. Literally I don't think  
8 he's done anything on it. There's no list of those  
9 days, there's no event studies, there's nothing that  
10 he's done on those days.

11 So certainly it is my opinion that doing  
12 nothing is not -- is not sufficient. What I've done  
13 in my analysis is to show the challenges that would  
14 be inherent in doing the types of things that I  
15 think would be appropriate to do. And to  
16 demonstrate that you have a damages model that's  
17 capable of dealing with these complexities. So I'm  
18 illustrating the complexities and this is a part of  
19 that illustration of those complexities.

20 BY MR. BLATCHLEY:

21 Q Okay. So just so I understand, your  
22 testimony is that Figure 5 is really just an  
23 illustration concerning what would need to be done  
24 at some point concerning the damages analysis that  
25 would have to be conducted in this case?

1 MR. BLAIR: Objection. Misstates  
2 testimony.

3 THE WITNESS: I'm sorry but I'm trying to  
4 think through what you just said if I'm remembering  
5 the exact -- the exact question.

6 I think the question in spirit is  
7 directionally right. I don't think it's necessarily  
8 precisely right. It's certainly not the totality of  
9 it. So let me see if I can answer the question in a  
10 way that answers your question as well.

11 So my understanding is that at this stage  
12 in the proceeding one needs to have a damage  
13 methodology that is capable of dealing with the  
14 allegations in the case, and potential outcomes of  
15 those allegations.

16 In other words, is it capable -- if it  
17 turns out that certain things are thrown out, is the  
18 damages model capable of dealing with that. And I  
19 spend a lot of time in my report outlining things  
20 like the scaling, the parsing, those types of things  
21 that would need to be required to do inflationary --  
22 an inflationary ribbon.

23 And all of this is really kind of under the  
24 heading of the price impact, and so this particular  
25 Figure 5 is part of that overall analysis to show

1 this is not a simple case where there's a single oh,  
2 I allege that we got a great contract, and then  
3 later it turns out oh, we didn't get that great  
4 contract, and the stock price goes up initially and  
5 then goes down later.

6 Even those cases can have some  
7 complexities, but they're simpler at least in  
8 framing them.

9 Here we've got a very, very complex case  
10 from a damages perspective. You've got 52  
11 inflationary days, you've got five categories of  
12 inflation, you've got this intermediate period of  
13 either no or low cramming, a little unclear what the  
14 exact allegations are.

15 And this is part of illustrating the fact  
16 that one needs to have a damages model that is  
17 capable of dealing with these complexities. And  
18 Dr. Hartzmark has not described a damages model at  
19 all that would deal with these things.

20 BY MR. BLATCHLEY:

21 Q Got it.

22 And so, again, this Figure 5 is really  
23 focused on the shortcomings that you believe  
24 Dr. Hartzmark -- his report has in coming up with  
25 the damages model; is that right?

1           A       Well, it's certainly not right that, you  
2       know, Figure 5 represents these shortcomings of  
3       Dr. Hartzmark's model. I mean, Dr. Hartzmark's  
4       model is essentially subtraction.

5                   He says that an inflationary ribbon could  
6       be developed at some point by someone, and then one  
7       can look at the day you bought a stock and the day  
8       you sold it or the day you held it, and one can do  
9       subtraction and figure out the difference.

10                  I don't view that as much of a model.  
11       That's really just more of a high level concept or  
12       even just a mathematical technique of subtraction.

13                  This -- what I think -- so having not done  
14       anything to describe what a model is, I have given,  
15       you know, a fair amount of analysis in my report to  
16       illustrate the kinds of things that would -- a model  
17       would need to be able to account for, and this is  
18       one of those things in there.

19           Q       Okay. And, again, it's focused on what you  
20       believe are the shortcomings of the damages  
21       methodology that Dr. Hartzmark provided?

22           A       I -- I think -- I think, yes, I think is  
23       the answer to your question. Again, this and many  
24       other things in my report are focused on what I  
25       believe to be the shortcomings of Dr. Hartzmark's

1 quote/unquote model.

2 But I would take it even a step further to  
3 say it's also representative of the challenges that  
4 any damages methodology would have on these things.

5 So certainly having not done anything,  
6 there's -- by definition it's deficient,  
7 Dr. Hartzmark's model. But I'm also pointing out  
8 that -- again, this is not a simple case, and these  
9 complexities I think raise real questions, including  
10 the -- the price analysis that is a part of this  
11 same figure and other parts where I described, I  
12 think raise very serious questions about -- I don't  
13 know that it can be done, honestly.

14 Q So you were mentioning that as part of that  
15 analysis in Figure 5 it was important to consider  
16 the allegations in the Complaint. Is that -- could  
17 you walk me through what you meant by that?

18 A Sure. So, again, a part of what I've tried  
19 to do in Figure 5 in the middle column is to map --  
20 there are five categories of -- what do I call them  
21 here? -- alleged mis- -- misstatements.

22 So I pulled these from the Complaint. I  
23 referenced them, the specific citation I believe in  
24 the text of the report, so there are five categories  
25 of misstatements.

1           For example, the customer first strategy,  
2     the -- you know, the business conduct and sales  
3     practices, I was looking at No. 1 and No. 4 just by  
4     way of example. So those are the categories that  
5     plaintiffs have identified.

6           The reason that that's important for the  
7     analysis, which I think was your question, is that  
8     one needs to have a damages model that is able to  
9     deal, in my experience, with various outcomes that  
10    may happen as the litigation proceeds.

11          So, for instance, there are these five  
12    categories. Well, it may well be found that one or  
13    more or several of them ultimately are not part of  
14    the final case. And so one needs to have a damages  
15    model that's able to parse those out.

16          So effectively to say if -- for example, if  
17    Categories 3, 4 and 5 were found to not be part of  
18    the case, how would that change your measure of  
19    damage, Dr. Hartzmark's sort of subtraction.

20          Presumably the answer is it would change  
21    the inflation ribbon, but in my experience one would  
22    need to do more than just say that, to say oh, well,  
23    it would change the inflation ribbon. One needs to  
24    describe a methodology of how one would do that.  
25    And certainly that's not been done.



1 Q So you spoke about your experience. Let's  
2 turn to that for a second. We got a little bit  
3 sidetracked.

4 So you did undergraduate work at Pacific  
5 Lutheran University?

6 A Right.

7 Q Then you attended -- is that right?

8 A Yes. That's right.

9 Q Then you attended Harvard for -- for a  
10 master's in public policy, correct?

11 A That's correct, yes.

12 Q And then you did public policy Ph.D.  
13 coursework at Harvard; is that right?

14 A Yes. That's correct.

15 Q Okay. And it says -- so you completed the  
16 master's in public policy in 1990, and then you did  
17 the coursework for the Ph.D. from '94 to '97; is  
18 that right?

19 A Yes. I had -- I had completed my Ph.D.  
20 exams, my qualifying exams at the end of my  
21 master's, and I then worked for several years in  
22 between, and then returned to Harvard, completed the  
23 additional coursework. I was working on my  
24 dissertation when I started working with Analysis  
25 Group.



1 Q Okay. And then so did you pass those  
2 exams?

3 A Yes.

4 Q Okay. But you just -- why did you leave  
5 without completing your Ph.D.?

6 A I started working with Analysis Group and  
7 initially was part time and then started working  
8 full time, and I -- it was a combination of the  
9 work, a lot of work. I had young kids at the time.

10 I also had realized during that period that  
11 although I liked teaching and I taught at Harvard  
12 while I was there, I actually realized that I was  
13 better suited for a consulting environment.

14 So the need for the actual completion of  
15 the dissertation, which is essentially required to  
16 teach, that wasn't critical for my consulting.

17 I had done consulting before this, and  
18 found that the type of consulting that Analysis  
19 Group did, which was the type that we're discussing  
20 right now, was really an excellent fit.

21 So basically the need for completion and  
22 just the time between working full time and the kids  
23 and all of that, so I -- I decided that I was not  
24 going to complete the dissertation.

25 Q So while you were at Harvard, I guess that

1 period that we talked about, that time period, what  
2 courses did you take in econometrics and/or  
3 statistics?

4 A Econometric, and what was the second part?

5 Q Statistics.

6 A Oh, yes. So I took -- I both took NTAs for  
7 statistics classes as part of the master's program  
8 in econometric.

9 And then in my Ph.D. coursework I also took  
10 additional econometric and additional statistics and  
11 was also a teaching fellow for that.

12 So I was a TA for Jim Stock, for instance,  
13 who's a Harvard professor in statistics, so...

14 Q Yeah. Was that in financial economics --  
15 econometric?

16 A Well, not -- I mean, financial econometrics  
17 is sort of a particular application of more  
18 generally econometrics --

19 Q Right.

20 A -- out there.

21 So when I was -- when I was at Harvard most  
22 of the econometrics we were doing, I don't recall  
23 that it was specific to securities prices, things  
24 like that. It was more general econometrics.

25 Q Like public policy issues?

1           A     Well, I mean, all sorts of data sets,  
2     analyzing, you know, survey data, things like that.

3           Q     Yeah. But not like securities prices or --

4           A     Not...

5           Q     You just referenced it wasn't securities  
6     prices, it wasn't...?

7           A     No, not -- not specifically while I was at  
8     Harvard. I've done that many times --

9           Q     Right.

10          A     -- in my professional career.

11          Q     So while at Harvard, did you -- were you  
12     taking any courses in finance?

13          A     Yes.

14          Q     Okay. And what courses were those?

15          A     I took finance and I took some classes over  
16     at the Harvard Business School as well.

17          Q     What about accounting?

18          A     I had taken accounting as an undergraduate.  
19     I don't recall taking any additional accounting  
20     classes in graduate school.

21          Q     And then financial modeling at Harvard?

22          A     I took many classes involving modeling, and  
23     many of them involved modeling the economics of  
24     various programs.

25          Q     What about like financial modeling for like

1 public companies?

2 A I'm not sure what you mean "financial  
3 modeling for public companies." I mean, I -- when I  
4 was taking classes at the business school, we  
5 certainly would analyze financial statements of  
6 companies, things like that, if that's what you're  
7 referring to, yes.

8 Q And then you said you've taken a course in  
9 financial statements analysis.

10 A A specific course in financial statement  
11 analysis, again, I took accounting and I've taken --  
12 the classes at the business school involved  
13 financial statement analysis.

14 And that's basically what I did for several  
15 years at Arthur Andersen. Between finishing my  
16 master's and going back to finishing my Ph.D. as  
17 well was work with companies and their financial  
18 statements and other aspects of their operation.

19 Q What about time period econometrics? Do  
20 you know what I mean when I say that?

21 A Yes. That's something that I did as an  
22 undergraduate -- or as a graduate student and again  
23 we've done it many times since then. I've done it  
24 many times since then.

25 Q And what about regression analyses?

1 A That is the same as econometrics.

2 Q And what about courses just on valuing  
3 publicly-traded companies?

4 A Again, yes. It was part of my financial  
5 courses, also part of the business school courses,  
6 also what I've done for 25 years.

7 I think we lost Zoom again.

8 Q Yeah.

9 A Is it?

10 Q I'm on hold. Yes. Are you okay going --

11 A But I'm fine keeping going.

12 Q You've -- and when you say, you know,  
13 you've done that throughout your career, you're  
14 referring to your -- how long have you been at  
15 Analysis Group?

16 A Hang on a second. Let me -- are you seeing  
17 me? I don't see -- oh, there I am.

18 MR. BLAIR: Yeah. You're back, Bruce.

19 THE WITNESS: Okay. Yeah. I hope it's not  
20 going to keep doing this every 20 minutes, but we'll  
21 see. It's fine. I mean, we're having a nice  
22 conversation.

23 Sorry. Do you mind repeating the question.

24 BY MR. BLATCHLEY:

25 Q Yeah. Just how long have you been at

1 Analysis Group?

2 A Oh, Analysis Group, 24 years.

3 Q Okay. And it's fair to say that since --  
4 since your work at Harvard that's where you've been;  
5 is that accurate?

6 A Essentially. To be precise I was actually  
7 at Harvard two different times so I was there -- I  
8 graduated with my master's in 1990, then I spent a  
9 year working for a consulting group part of Harvard  
10 University in Indonesia. It's called the Harvard  
11 Institute for International Development.

12 Then I was in Seattle for several years  
13 working with Arthur Andersen, at the time the  
14 biggest accounting and consulting firm in the world,  
15 working on their -- their financial and strategic  
16 consulting group.

17 And then I was back at Harvard working on  
18 my Ph.D., and that's when I started working with  
19 Analysis Group. And since then I've only worked  
20 with Analysis Group.

21 Q Okay. So since your second time at  
22 Harvard, you've only been at Analysis Group and  
23 that's been for 24 years, correct?

24 A Correct.

25 Q And at Analysis Group your job is either as

1 a testifying or consulting expert; is that right?

2 A Yes. That's right.

3 Q And of your clients, am I right to say  
4 that, you know, overall they are litigants?

5 MR. BLAIR: Object to form.

6 THE WITNESS: It varies. I would say  
7 probably 75 percent, maybe around there, I suspect  
8 it's a good estimate, of what I do is being involved  
9 in disputes of some sort.

10 About 25 percent is other things that are  
11 not directly disputes. You know, cost effectiveness  
12 analysis, we helped run a big Medicaid program in  
13 Washington State, I mean, various other economic  
14 analyses.

15 But about three quarters of it involves  
16 disputes. They're not always direct litigation.  
17 Sometimes investigations, regulatory matters,  
18 arbitrations, variations of those things. But I  
19 think it's fair to generally categorize them as  
20 disputes.

21 BY MR. BLATCHLEY:

22 Q So if I turn to your appendix, you've got  
23 listed kind of two categories of work that you've  
24 done, and one is consulting and another is  
25 testifying.

1           A       I mean, I agree with that generally. I'm  
2 not sure exactly what you're referring to, but I  
3 agree with the general categories.

4           Q       Yeah. Can you just describe to me what  
5 that difference means?

6           A       Sure. So testifying is -- is ultimately  
7 doing exactly what we're doing right now, where I'm  
8 serving as the testifying expert providing reports,  
9 deposition testimony, trial testimony, arbitration  
10 testimony, things like that.

11                   The consulting testimony is either we may  
12 initially be hired but ultimately things resolve in  
13 a way before I have to provide any actual expert,  
14 again, reports, testimony, things like that.

15                   Or in some cases also I'm working with  
16 typically in academics who may be doing testifying,  
17 but I'm helping coordinate and analyze things and  
18 run the projects at their direction, and I've done  
19 that over my career.

20                   I do a little bit of that now. Mostly now  
21 I do testifying myself, but both of those threads of  
22 work have been part of my career at Analysis Group.

23           Q       So I just want to make one thing clear, in  
24 the consulting cases you didn't provide any  
25 testimony, correct?



1           A       That's correct. Not -- I mean, there may  
2       have been testimony provided by the testifying  
3       expert, but I myself did not provide testimony.

4           Q       You did not provide opinions in those  
5       cases?

6           A       That's correct.

7           Q       Okay. So your Paragraph 27 of your report,  
8       this is again describing your background and your  
9       experience. And you talk about a number of  
10      securities matters that you've worked on, including  
11      class action matters for Ernst & Young, AT&T,  
12      Oracle, Williams and Alibaba?

13          A       Yes.

14          Q       So were -- and maybe just take a step back  
15      and you can answer the broad question first. How  
16      many securities Section 10b class actions have you  
17      testified in?

18          A       I think the -- none in terms of actually  
19      trial testimony. I don't recall depositions. I've  
20      provided expert reports in securities cases,  
21      including one very recently. That's what I can  
22      recall.

23          Q       What was the recent expert report?

24          A       On Allstate securities class action.

25          Q       And what was the opinion in that report?

1           A     So, again, that's an ongoing matter but I  
2     filed one report. There I was looking at the  
3     substance of the allegations, so it wasn't the class  
4     certification part of it. It was the subsequent  
5     analysis of the substance of the allegations.

6           Q     So and, again, just commenting on the  
7     veracity of those allegations or something  
8     related --

9           A     Yeah. I think that's fair to say, yes.  
10    The accuracy of the allegations in the Complaint.  
11    It's just a complicated statistical analysis of  
12    various sorts.

13          Q     And it was related to the claimed damages  
14    in that case, wasn't it?

15          A     I mean, everything is related to the  
16    claimed damages obviously in some general sense, but  
17    I wasn't -- I wasn't specific to a calculation of an  
18    inflation ribbon, for instance, or damages, yes,  
19    that's correct.

20          Q     Okay. So you mentioned the Allstate case  
21    and there was perhaps one other that you provided  
22    deposition testimony; is that right?

23          A     I'm sorry. I'm just trying to remember.  
24    I'm not recalling any specific names as I sit here.  
25    I'd have to think about it more, but that's the one

1 that comes to mind.

2 Q Okay. So it's correct to say that you've  
3 never testified in a securities class action --  
4 Section 10b securities class action in connection  
5 with a motion for class certification?

6 A I think that precise question, the answer  
7 is yes, that's right. I certainly testified on  
8 class certification many times in class action  
9 matters. And I've led analyses teams at Analysis  
10 Group under the direction of testifying experts on  
11 those topics, again, many times, but I have not  
12 specifically testified myself prior to this.

13 Q Yeah. So I just want to make sure I've got  
14 that right.

15 Again, you've never testified in a  
16 Section 10b securities class action in connection  
17 with class certification?

18 A I believe that's correct, yes. I can't  
19 recall any other ones.

20 Q So and you said you've done consulting work  
21 in connection with class certification generally,  
22 right?

23 A I have testified in class certification  
24 matters many times.

25 Q And then --

1           A       Just not in -- your question was very  
2       specific, the Section 10b securities matters. I  
3       view this as a general category of class --

4           Q       Yeah.

5           A       -- certification. I've done that many  
6       times. But to the specific question of 10b  
7       securities matters, no.

8           Q       Okay. And then just in terms of your  
9       consulting work, has any of your consulting work  
10      been in connection with a motion for class  
11      certification in a Section 10b securities class  
12      action?

13          A       Yes.

14          Q       And which were those matters?

15          A       I'm not sure if I can remember all of them,  
16      but certainly numerous times. So one that's not  
17      listed here was Clarent, which was one of the few  
18      securities class actions to ever actually go to  
19      trial.

20                   It went to trial in San Francisco and we  
21      were involved all the way through on that, including  
22      the class certification portion of that.

23                   I believe on Alibaba recently, for  
24      instance, we were involved in a class certification  
25      analysis of that. I've done several cases for

1 Ernst & Young where they were sued as part of that.

2 So those are a few that I can recall off  
3 the top of my head, but I've done it a couple times.

4 Q So I want to make sure that the question is  
5 right and your answer is responding to the question.  
6 I'm limiting the question to Section 10b securities  
7 class actions work in connection with class  
8 certification.

9 Is it your understanding that the Alibaba  
10 case alleged claims under Section 10b?

11 A Well, actually, you know what, I'm sorry.  
12 Thank you for that clarification. I think that's an  
13 IPO allegation so it's actually -- whatever the  
14 section is under that, I think that's right so I'd  
15 have to go back. But, yeah, that's -- I mean, it's  
16 a difference. I agree.

17 So that was a securities class action but  
18 not -- it was involving the allegations around the  
19 IPO. So -- but the other ones I believe, you know,  
20 were Section 10b claims.

21 Q So maybe I'll ask it this way: So in  
22 Appendix -- I guess it's Appendix A, you never --  
23 not one of those examples is one in which you've  
24 testified as an expert on class certification in a  
25 Section 10b securities class action?

1           A     I think you've already asked and I've  
2     answered that question. Yeah, that's right.  
3     I've -- I've testified on class certification many  
4     times and I've been involved in Section 10b class  
5     analyses many times, but I have not testified prior  
6     to this in a 10b securities class action on class  
7     certification issues.

8           Q     And, again, the consulting matters that you  
9     mentioned, one was not a Section 10b case, the  
10    Alibaba case, and you mentioned Clarent.

11                   And in that case the class is certified; is  
12    that right?

13          A     That's correct, yes.

14          Q     Okay. And can you name for me any other  
15    securities class actions in which you've provided  
16    consulting work in connection with a class -- sorry,  
17    a motion for class certification?

18                   MR. BLAIR: Objection to the form, asked  
19    and answered.

20                   You can answer, if you know.

21                   THE WITNESS: Yes. So I -- I can't recall  
22    off the top of my head exactly which ones. For  
23    instance, the other ones are Ernst & Young, I've  
24    worked on a number of securities cases for them, the  
25    AT&T case, the Oracle case, those were all cases

1 where they were 10b security cases and we worked on  
2 many aspects of them, to the best of my recollection  
3 that included a class, but I don't recall  
4 necessarily all the details as I sit here right now.  
5 BY MR. BLATCHLEY:

6 Q So, again, this might be a little inside,  
7 but Ernst & Young is an auditor, right?

8 A Yeah. They're an auditor. Well, they're  
9 an accounting firm. They would typically be sued as  
10 the auditor in cases, that's right.

11 Q So it's a third-party auditor firm. And I  
12 assume in the cases that you're discussing there's a  
13 corporate defendant, issuer defendant?

14 MR. BLAIR: Object to the form.

15 THE WITNESS: If I -- I'm sorry. Go ahead,  
16 Ryan.

17 MR. BLAIR: That's fine.

18 THE WITNESS: If I understand your  
19 question, there would typically be -- a company  
20 would be sued, for instance, and the auditor would  
21 be sued as well, if that's your question.

22 BY MR. BLATCHLEY:

23 Q And so I'm just trying to get at, you know,  
24 the consulting work, you're guessing -- you're not  
25 guessing. You're hypothesizing -- again, correct

1 me -- say it however you want -- that you've done  
2 work in connection with a class -- consulting work  
3 in connection with securities class actions under  
4 Section 10b -- let me ask it this way:

5 Do you understand that the cases that you  
6 were working on in those matters for Ernst & Young  
7 alleged Section 10b claims against Ernst & Young?

8 A Again --

9 MR. BLAIR: Object to form.

10 THE WITNESS: -- to the best of my  
11 recollection I'd have to go back and look and see.  
12 I mean, they -- they were certainly being sued as  
13 part of the -- as a defendant in a 10b case, so --  
14 but I'd have to go back and look at the nuances of  
15 that.

16 BY MR. BLATCHLEY:

17 Q So I'm trying -- because you're saying in  
18 those matters, you're doing the work on behalf of  
19 Ernst & Young so I assume you're not, you know,  
20 doing work on behalf of the defendant issuer,  
21 correct?

22 A On those particular cases, that's right.  
23 I've certainly worked on many cases where I have  
24 been working on behalf of the -- what you call the  
25 defendant issuer.



1 Q And so -- and I guess what I'm trying to  
2 say, you're not, you know, in your consulting work  
3 in those cases on behalf of Ernst & Young, providing  
4 any consulting work with respect to, let's say, you  
5 know, a loss causation?

6 MR. BLAIR: Object --

7 THE WITNESS: Sorry. What was the last  
8 word?

9 BY MR. BLATCHLEY:

10 Q I'm caveating it to the class certification  
11 motion. Your work on behalf of Ernst & Young in  
12 providing an analysis as part of your consulting  
13 role in the cases we've been discussing, that has  
14 not involved, for example, opining on price index?

15 MR. BLAIR: Object to the form.

16 THE WITNESS: You know, I -- I don't  
17 recall. I don't know that that's an accurate  
18 statement. I don't recall the details of it, but I  
19 know we've worked -- I've definitely worked on  
20 numerous class certification and price impact type  
21 analyses over many years. I don't recall all the  
22 details of all of the cases.

23 BY MR. BLATCHLEY:

24 Q So let me just limit it to the past six  
25 years of any of your -- has any of your consulting

1 work been in connection with a class certification  
2 motion in a securities class action Section 10b  
3 case?

4 A I think that's a little hard to answer  
5 specifically in the sense that quite a number of  
6 times we're asked at the early stages of cases to  
7 provide consulting analysis, to look at, you know,  
8 price drops, to analyze statistical significance to,  
9 you know, kind of do the things that are similar to  
10 what I've done here.

11 And fairly often those cases resolve pretty  
12 quickly, so I think your specific question was, you  
13 know, with regards to a motion, so I don't -- many  
14 cases there's no report like I'm providing here, but  
15 it is in a class certification stage and the  
16 analyses is very similar, so I've done that many  
17 times there.

18 So I think -- I can't recall in the last  
19 six years -- it may well have been. I'd have to go  
20 back and look at the list and think about it. We've  
21 been over the fact that I haven't been a testifying  
22 expert in any of those cases. I've done it many  
23 times in the last six years. You know, whether  
24 those were officially part of reports that were part  
25 of motions for opposition to -- or part of the

1 summary judgment, I don't recall as I sit here right  
2 now.

3 Q Yeah. And I just wanted to clarify that,  
4 which is it's not summary judgment. It's the motion  
5 for class certification. And I think -- I just want  
6 to make sure I've got your testimony right.

7 That you since -- for the past six years,  
8 can't name any report that you worked on for the  
9 Analysis Group in connection with opposing class  
10 certification in a Section 10b case?

11 MR. BLAIR: Object to the form.

12 THE WITNESS: I don't recall a specific  
13 name as I sit here. As I said, I've done it many  
14 times in the last six years, but I don't recall  
15 whether any of those were officially reports that  
16 were filed as part of the motion. I just don't  
17 recall.

18 BY MR. BLATCHLEY:

19 Q Okay. So, again, going back to that, you  
20 have not testified as an expert in opposing class  
21 certification in a Section 10b case ever, right?

22 A That's accurate, yes, in terms of I've  
23 never testified.

24 Q So your opinion in that context has never  
25 been accepted by any court?

1 MR. BLAIR: Object to the form.

2 THE WITNESS: I'm sorry. It's sort of a  
3 tautology. If I haven't offered an opinion, then  
4 certainly it can't be accepted or rejected by a  
5 court. I've never had my opinion rejected by a  
6 court, so -- but I'm viewing it as sort of a  
7 tautology.

8 BY MR. BLATCHLEY:

9 Q Okay. And you've never been a testifying  
10 expert, so you've never submitted a report in the  
11 context that we've been discussing?

12 MR. BLAIR: Object to the form.

13 THE WITNESS: Not that I can recall.

14 MR. BLATCHLEY: Okay. Do you guys think  
15 it's an okay time to take a quick bathroom break --  
16 or a quick break?

17 MR. BLAIR: I think that makes sense. How  
18 about ten minutes work?

19 MR. BLATCHLEY: Ten minutes is fine.

20 MR. BLAIR: Okay.

21 THE WITNESS: Yeah.

22 THE VIDEOGRAPHER: I'll do the read off  
23 here.

24 MR. BLAIR: I'll just remind everybody to  
25 go on mute and perhaps stop video as well while

1 we're on break.

2 THE VIDEOGRAPHER: Very good. We are off  
3 the record at 10:18 a.m.

4 (Off the record from 10:18 - 10:32 a.m.)

5 THE VIDEOGRAPHER: Okay. So the time is  
6 now 10:32 a.m. and we are back on the record.

7 BY MR. BLATCHLEY:

8 Q Thank you, Mr. Deal.

9 If I could ask you to turn to Paragraph 25  
10 of your report.

11 A I'd be happy to. Do you mind if I --  
12 during the break I actually -- I was thinking about  
13 the line of questioning you were on before. Do you  
14 mind if I add something to that?

15 Q Yeah.

16 A So you had asked me about specific cases.  
17 So I didn't recall during the questioning but I  
18 since recalled during the break that there was a  
19 class action City of Pontiac case against Dell where  
20 Professor Hubbard from Columbia University was the  
21 expert for Dell, and it was exactly addressing class  
22 certification issues, very similar, actually, to the  
23 report that I've offered in terms of the basic  
24 framing and issues.

25 And that was a team that I had led on the

1 Analysis Group side, so...

2 Q And when was that report submitted?

3 A Last year, as I recall. Possibly the year  
4 before, but 2019 or 2020.

5 Q What stage of the case is that now?

6 A It settled.

7 Q Okay.

8 A Now I'm happy to turn to Paragraph 25. I  
9 think that's what you asked before I interrupted.

10 Q Do you recall in that -- never mind.

11 Paragraph 25, this describes your  
12 assignment, right?

13 A Yes. That's right.

14 Q I just wanted to talk about this for a  
15 minute, because I wasn't really sure. When you say  
16 here "I have been asked to address a number of  
17 economic issues in this report. I focus first on  
18 the economic framework discussed above," which you  
19 say is "absent from the Hartzmark report. I then  
20 provide analysis related to his actual opinions,  
21 including analysis and critique of his event study  
22 methodology for both CenturyLink's equity and its  
23 7.60 notes."

24 With my paraphrasing is that an accurate  
25 statement of what your assignment was?

1           A     Yes.

2           Q     So what does it mean -- what does the  
3 "number of economic issues" here mean? What does  
4 that mean? What is that referring to?

5           A     Yeah. So I think at the highest level I  
6 think of my report and my assignment as sort of  
7 having two parts to it.

8                     So the second part in some sense is easier  
9 to describe, and that's the last sentence really  
10 which is to say I've been asked to look at the  
11 specific statistical analysis that he's done with  
12 regard to these event studies and abnormal return  
13 calculations, and I've got a section -- or two  
14 sections, one on equity and one on bonds in my  
15 report specific to that.

16                    The general statement, which you just  
17 referred to really -- my assignment is broader there  
18 which is to say to both describe the economic  
19 analyses and the economic framework and damages  
20 framework that I understand to be appropriate and  
21 needed in a case like -- a general case like this,  
22 meaning a securities class action.

23                    And to also then do work to identify  
24 challenges doing that type of work, whether it's  
25 possible or likely to be possible, doing some price

1 impact analyses on the inflationary work, so it's  
2 a -- I mean, it's basically all the things that are  
3 in my report, but I characterize them here as a  
4 number of economic issues, because they sort of  
5 don't fall into just one bucket, largely because  
6 Dr. Hartzmark hasn't actually done any of those  
7 other things.

8 So it sort of a void that needs to be  
9 filled, and I've given quite a bit of analysis to  
10 identify issues and challenges and whether it's  
11 likely that it can or can't be done accurately. But  
12 it's really the absence of any analysis that I'm  
13 filling or partially filling on the front end of my  
14 opinions.

15 MR. BLAIR: I'm hearing -- I'm picking up  
16 background noise.

17 THE WITNESS: I'm getting that as well.

18 MR. BLAIR: Can everyone other than Mike,  
19 Bruce and myself please mute their lines.

20 MR. BLATCHLEY: Let me try this, guys.

21 MR. BLAIR: I don't think it was you, Mike.  
22 It kind of shows who's making noise. I think  
23 Dr. Hartzmark may need to mute his line.

24 MR. BLATCHLEY: Is this better now? Are we  
25 okay?



1 MR. BLAIR: Yeah. Thank you.

2 THE WITNESS: Yeah. I think that is  
3 better.

4 BY MR. BLATCHLEY:

5 Q Just following up on your answer, and I  
6 guess I just want to understand -- make sure I  
7 understand the assignment. It sounds like the  
8 preliminary assignment -- and tell me where I'm  
9 wrong -- is to criticize what Dr. Hartzmark said in  
10 his report and show where he fell short; is that  
11 right?

12 MR. BLAIR: Objection to form.

13 THE WITNESS: Ryan, did you have a specific  
14 objection? Sorry. I think I started.

15 MR. BLAIR: Just to the form, vague.

16 THE WITNESS: Okay.

17 I mean, I certainly don't disagree with  
18 that in the sense that I do -- I do view my report  
19 as a rebuttal report. I think the challenge on  
20 this -- and the reason that it's not as simple an  
21 answer as you characterize the question is because,  
22 again, he really hasn't done any of what I view and  
23 I understand to be necessary to do at this stage.

24 So broadly speaking that's sort of a  
25 headline critique, but I try to go beyond that, not

1 just say he didn't do it, but to actually show the  
2 kinds of things that would need to be done and the  
3 challenges associated with those and whether it is  
4 likely it either could be done at all or whether  
5 there's any, for example, price impact, those sorts  
6 of things.

7 So I've gone beyond just a simple critique,  
8 but I agree at a high level it's sort of under a  
9 headline of, you know, quote/unquote shortcomings by  
10 which I think are your words of Dr. Hartzmark's  
11 analysis.

12 BY MR. BLATCHLEY:

13 Q So were you given the assignment of figure  
14 out whether it's possible or likely to be possible,  
15 you know, to, like you said, to do a damages model  
16 and to show price impact?

17 A I certainly wasn't asked to develop all the  
18 way through a methodology to identify price impact.  
19 That's the plaintiffs' burden, as I understand it,  
20 in these matters.

21 So I was asked to identify whether -- to  
22 discuss whether or not what Dr. Hartzmark has  
23 proposed is sufficient. I believe it's not. And  
24 to -- as I said before, go beyond that to analyze  
25 all the things that I've been talking about, which

1 I'm sure we'll continue to talk about in the coming  
2 time here, about the specifics of those deficiencies  
3 and whether or not it's likely that one could put  
4 together the type of analyses that I view would be  
5 necessary.

6 Q Again, just because, you know, it says  
7 you're to analyze a number of economic issues, and  
8 it's a very long report, were you specifically asked  
9 to -- for example, you have a section in your report  
10 about whether the cramming was material.

11 Were you instructed to go determine whether  
12 cramming was material?

13 A I'm not actually sure what you mean by  
14 "whether cramming was material." I don't think  
15 that's a headline on any of my sections. I mean, I  
16 agree that I talk about cramming and the fact that  
17 that was something that was known ahead of time.  
18 Allegations of cramming in the industry were known.

19 I'm not -- maybe you can point me to a  
20 section that specifically talks to that and help me  
21 out.

22 Q Yeah. I'm sorry if I misspoke. I was  
23 referring to Section I think 4- -- C., Page 49 that  
24 says "There is no evidence that the alleged sales  
25 practices had a material impact on revenue."

1           A     Oh, okay. Well, if I understand your  
2     general question, counsel did not instruct me  
3     "Specifically I want you to" -- "Mr. Deal, to, you  
4     know, specifically identify" -- "say these sections  
5     and these issues." It was a broader assignment than  
6     that.

7                     I view this analysis here to be part of  
8     what's important with that broader assignment, but  
9     it was a broader assignment that I was given by  
10    counsel. I think that was the spirit of your  
11    question but tell me if I'm not answering it.

12           Q     It was. I mean, I just read that and I  
13    was -- you know, it seemed like oh, figure out  
14    what's wrong with his report, so I wanted to get  
15    clarity on that, and I think you provided it.

16           A     Okay.

17                     THE VIDEOGRAPHER: Let me just break in for  
18    a second. Mr. Deal, I'm kind of losing your face,  
19    the bottom part of it. Can you pull your screen  
20    down a little bit, please.

21                     Thank you very much. I appreciate that.

22                     Go ahead, Counsel.

23                     THE WITNESS: I don't know if that would be  
24    good or bad to lose my face, but that's all right.  
25    We'll go with fixing it, so...

1 BY MR. BLATCHLEY:

2 Q Here's what I wanted to do is just to make  
3 sure I understood the opinions that you're offering.  
4 And there's a number of paragraphs describing a  
5 summary of your opinions, but I'd actually ask you  
6 to go to Paragraph 7 and just to look at the last  
7 sentence of that paragraph.

8 A Just to be completely clear I think that  
9 paragraph is one sentence. Is that -- I don't see  
10 any other periods, so you're really asking me to  
11 look at the paragraph, I think.

12 Q Yeah. I'm sorry. I mean, I was really  
13 referring "plaintiffs have demonstrated neither that  
14 the alleged misrepresentations artificially inflated  
15 the price of CenturyLink's securities, nor that the  
16 alleged corrective disclosures were actual  
17 disclosures as opposed to reflections of uncertainty  
18 around allegations, nor have they a model capable of  
19 reliably measuring any common inflation in the event  
20 that any of the various allegations are found to be  
21 true."

22 A Okay.

23 Q Can you say that's an accurate summary of  
24 the opinions that are included in your report? And,  
25 again, I'll just give you the framework. I'm trying

1 to make sure I've got an accurate representation.  
2 We can go through the summary of your opinions if  
3 you'd prefer to do that. I just -- this is three  
4 and the summary of opinions is like six paragraphs.

5 A Yeah. Yeah. No. I understand what you're  
6 saying.

7 I think, again, with the sort of little  
8 asterisk that obviously there's a lot behind those  
9 statements, both in terms of additional elaboration  
10 in my summary of opinions and obviously the full  
11 report itself, but to the spirit of your question  
12 I -- I do think -- I think it's probably fair to say  
13 that is kind of an elevator speech, if you will,  
14 version of the opinions.

15 I think that's fair and that's -- again, at  
16 a very high level, it covers the front end  
17 inflation, the back end disclosures, the fact that  
18 there's no model that's been proposed to be able to  
19 deal with what I understand to be a lot of  
20 complexities associated with those. I mean, those  
21 are -- I think those are kind of three prongs, if  
22 you will, of that.

23 I think that was, Mike, what you were  
24 trying to get at; is that right?

25 Q That's right. And, again, I'm trying to be

1 efficient, if, you know --

2 A Yeah. Yeah.

3 Q I know everyone has got stuff to do.

4 So just taking that first one in that last  
5 clause that plaintiffs have demonstrated -- I know  
6 it's a long sentence that kind of begins elsewhere,  
7 but if I'm paraphrasing it accurately let me know.  
8 Plaintiffs have not demonstrated that the alleged  
9 misrepresentations artificially inflated the price  
10 of CenturyLink securities, right?

11 A Yes. That's right.

12 Q The preliminary analysis that you did, and  
13 that's reflective in Figure 5 that we had discussed  
14 earlier, correct?

15 A Well, Figure -- I agree that Figure 5 lists  
16 52 dates that are potential dates on which one can  
17 test whether or not there is any observed abnormal  
18 return, and dates in which one can try and map  
19 statements to allegations.

20 There are 55 days that are identified  
21 there, and that Figure 5 again includes sort of by  
22 reference some of the analysis on statistically  
23 significant abnormal returns and so forth. That's  
24 part of it, I guess is the short way of saying that.

25 Q Yeah. Wouldn't you say that's a key part

1 of what is supporting your opinion that plaintiffs  
2 haven't shown that the misrepresentations  
3 artificially inflated the price of the CenturyLink  
4 stock -- or securities?

5 MR. BLAIR: Object to the form.

6 THE WITNESS: Well, I mean, the heart of it  
7 is they haven't even tried. There's nothing in  
8 Dr. Hartzmark's report about what I've kind of  
9 broadly categorized as front end inflation here. So  
10 almost by definition there's no demonstration that  
11 it was artificially inflated.

12 I've tried to take that a step further and  
13 to show the complexities involved in doing that.  
14 But I certainly do think there are shortcomings.  
15 Again, almost it's tautology. If you don't do  
16 anything and something has to be done, they're  
17 clearly shortcomings.

18 BY MR. BLATCHLEY:

19 Q Figure 5 in the surrounding discussion is  
20 part of what you're offering as the analysis  
21 demonstrating that that is a very complex analysis  
22 to undertake?

23 A I certainly agree with that statement, that  
24 it is complex. I think that's -- I would go a step  
25 further and -- as I do in the report, and say where



1 I've done analyses that don't just say this is going  
2 to be hard, but, for instance, I run an event study  
3 on each of those 52 days and I find that only four  
4 of them are even positive abnormal returns.

5 I also look at those disclosures,  
6 especially the disclosures around, you know,  
7 quarterly and annual earnings, and I say there are  
8 dozens of metrics that are being discussed in each  
9 of those days, and so -- you know, again, I do those  
10 and more analyses -- I dig deep into those four days  
11 where I see positive abnormal returns and I see  
12 there's lots of things being disclosed and discussed  
13 on those days.

14 So my conclusion is on those that not only  
15 is it complex, I agree with that, and one needs to  
16 propose a model that could deal with that  
17 complexity, which in my view is that has not been  
18 proposed, but also that it's going to be very, very  
19 hard, if not impossible, to actually show that; to  
20 show that there's any price impact given that  
21 there's only four positive days, eight negative days  
22 in terms of abnormal returns, and 40 days of no  
23 impact, plus all the complexities.

24 So it's not just it's going to be hard. I  
25 think it's going to be -- it may well be impossible.

1 Q And so you haven't concluded -- you're  
2 obviously just saying it may well be, correct?

3 MR. BLAIR: Object to form.

4 THE WITNESS: Can you say -- Mike, did you  
5 say it may well be incorrect?

6 BY MR. BLATCHLEY:

7 Q Be impossible is the language that you  
8 used, correct?

9 A That's correct, yes.

10 Q You didn't, you know, go out and try and  
11 fail and it is impossible?

12 A I mean, I -- I think that's actually a  
13 harder question in some ways in the sense that I  
14 certainly did go and -- again, all of the work I've  
15 done, to me, it suggests -- I don't see a way to do  
16 it.

17 So, again, it's not the plaintiffs'  
18 burden -- or excuse me, not the defendant's burden  
19 as I understand it. Dr. Hartzmark hasn't done  
20 anything on it.

21 But it's not just "Oh, this is going to be  
22 hard" or "I tried one thing and it didn't work." I  
23 don't see how it can be done and I've given a lot of  
24 evidence to -- and analysis to support those  
25 opinions in my view.

1           Q     As part of that, though, you haven't  
2     developed your own model, again, proving the  
3     impossibility?

4           A     Again, that's an interesting statement in  
5     the sense that I think if you could truly develop a  
6     true model that would work, then it wouldn't be  
7     impossible.

8                     What -- again, I haven't been asked to take  
9     it all the way through to there, but I have gone  
10    down that path by doing all the analysis I've done,  
11    and I don't see a model that in my experience having  
12    done damages analyses for decades, you know, in a  
13    wide variety of cases, I don't see, given the  
14    complexity of this case, how one can do it.

15                    I haven't developed a model myself that can  
16    do it. Dr. Hartzmark clearly hasn't. I think a  
17    model would need to be developed and at least be  
18    able to describe how it would work at this stage and  
19    that work has not been done.

20           Q     I want to make sure what we're referencing  
21    again is the preliminary analysis that you set forth  
22    in Figure 5, that of course is not the model that  
23    would need to be done in this case, right? That's  
24    just your using that as an illustrative of the  
25    complexities involved in doing this?

1 MR. BLAIR: Object to the form, misstates  
2 testimony.

3 THE WITNESS: I think that's -- if I'm  
4 understanding your question, I think I mostly agree  
5 with it in the sense that it's not a model. I  
6 haven't myself quantified, hey, here, let me  
7 describe in 18 steps making -- using 18 as a  
8 completely made up hypothetical, of course, 18 steps  
9 how one would do a model or this is what a model  
10 needs -- would look like and quantify, you know, an  
11 inflation ribbon or a buildup of inflation. We're  
12 really talking right now I think about the front  
13 end, just to be clear, the inflationary side of it  
14 there.

15 So I haven't done that, but, again, as I  
16 said, I have certainly -- and having done this for a  
17 long time, I've said well, what are the kinds of  
18 things that one would need to be able to  
19 incorporate.

20 So you'd need to be able to incorporate the  
21 different categories of misrepresentation, you'd  
22 need to incorporate the actual alleged inflationary  
23 days. Here you'd need to be able to incorporate  
24 this middle period of supposedly no cramming into  
25 it. You'd look at each of those days and you'd see

1 the fact that you don't see any price impact on most  
2 of them -- "price impact" being a positive abnormal  
3 return -- as an initial basis for it.

4 So I've done enough work on each of those  
5 points to feel comfortable with my opinion that I  
6 don't see how it can be done. And I do think, given  
7 these complexities, one needs to describe a model if  
8 it can be done, and I -- I haven't done it. I don't  
9 see how it can be done, and certainly Dr. Hartzmark  
10 and the plaintiffs haven't done it.

11 BY MR. BLATCHLEY:

12 Q Coming back to this, so the -- when you  
13 talked about your testifying experience earlier,  
14 you've never testified as a damages expert in a  
15 securities class action under Section 10b, correct?

16 A That is correct.

17 Q And so you've never testified as to a  
18 damages model in a securities class section under  
19 Section 10b?

20 A I think that's effectively the same  
21 question, right? I mean, if I haven't testified on  
22 that --

23 Q Oh, no.

24 A -- I haven't testified on a particular  
25 topic, so...

1 Q So your point -- so, again, coming back to  
2 have you ever worked on a damages model in a  
3 Section 10b securities class action that, like, for  
4 example, disaggregates company-specific information  
5 from the alleged false statements?

6 A Yes.

7 Was there a pending question? I didn't  
8 hear.

9 Q Sorry. What matter was that in?

10 A Oh, I -- I can recall for sure having done  
11 it in Williams matter many years ago.

12 Q Is that the only example that you can think  
13 of?

14 A It's the one that comes to mind. There may  
15 well be others but it's the one that comes to mind.

16 Q That case you developed a model that was  
17 capable of disaggregating company-specific  
18 information from the alleged false statements?

19 A Yes. I think that's a fair statement. My  
20 recollection of the specifics was -- this is going  
21 from memory, so it's been a while, but there were a  
22 couple of things announced on a particular day and  
23 the stock dropped. Both of them directionally  
24 similar so, as I recall, they would both be things  
25 that would be expected to decrease the stock price,

1 and the stock price did go down.

2 And the -- it was required to parse or  
3 disaggregate the stock drop into the components that  
4 were part of the case and the components that were  
5 not part of the case, so that's the basic framework.

6 Q Again, I know it's a long time ago, but do  
7 you know just kind of the summary allegations of  
8 what that case was about and what was disclosed on  
9 the date you were just mentioning?

10 A I'm afraid that's probably trying to pull a  
11 little too deep in the recesses there but it was --  
12 again, the high level, as I recall, it was something  
13 like -- let me put it more in a hypothetical now,  
14 something like revenues missed expectations and we  
15 didn't get a contract.

16 So I don't remember that those are the  
17 specific facts but some variation of something like  
18 that.

19 Q Do you know how many different factors you  
20 were measuring in that particular model?

21 A My -- again, dredging pretty far back here  
22 in the memory cells, my recollection is just a  
23 couple, that there were a couple things going on.  
24 It's possible there might have been, you know, three  
25 or something, but it was not -- it certainly wasn't

1 the significance in terms of the number of metrics  
2 and things that are at issue here on some of these  
3 cases that are being identified.

4 So, you know, as these things go it was  
5 relatively straightforward.

6 Q I don't want to spend too much time on  
7 this. So Williams Energy Company, is that -- is  
8 that right? What was the fraud? What was the  
9 alleged fraud in the case?

10 A Again, you're probably asking to go deeper  
11 than I can recall there. I honestly just don't  
12 remember if it was, you know -- I just don't  
13 remember. Some sort of financial result, to the  
14 best of my recollection, but it's been a while.

15 Q An issue or something about misstating the  
16 reasons between financial results?

17 A You know, I'm sorry. I just don't  
18 remember.

19 Q In that case, you mentioned that you did a  
20 damages analysis that looked to a disclosure on a  
21 particular day. Was this a case involving one  
22 disclosure, many disclosures, corrective disclosures  
23 is what I'm referring to?

24 A You know, I'm not trying to be evasive, I  
25 just honestly can't -- can't remember. It's



1 certainly -- to the best of my recollection, it  
2 wasn't -- there wasn't a multitude of them. I don't  
3 remember whether it was just one or not, but, again,  
4 your question was on the disaggregation and parsing,  
5 and I do have a memory of doing that in that matter,  
6 but I don't recall a lot of details around it.

7 Q Returning back -- I'm sorry -- to  
8 Paragraph 7 and just kind of the last clause. You  
9 just talked about, you know, your criticism of, you  
10 know, front end inflation.

11 The second clause there, and I'll  
12 paraphrase, tell me if I'm wrong, you're saying the  
13 alleged corrective disclosure -- you're criticizing  
14 whether the alleged corrective disclosures in our  
15 case, in our Complaint, were actual disclosures as  
16 opposed to reflections of uncertainty surrounding  
17 allegations.

18 Is that an accurate way of saying what your  
19 opinion is there?

20 A Yeah. Again, that's sort of, again,  
21 somewhat the elevator speech version of them, but I  
22 think it's not inaccurate.

23 Q Yeah. Sir, if I were doing an elevator  
24 speech, it's a long report.

25 What you did there, roughly speaking, and

1 tell me where I'm wrong, is you examined the  
2 corrective disclosures and, you know, stock price  
3 declines that followed, and you did an analysis of  
4 whether -- the plausibility of plaintiffs'  
5 allegation that the corrective disclosures caused  
6 the stock prices to decline and whether they were,  
7 you know, sufficiently curative to be, I guess,  
8 actual corrective disclosures; is that fair?

9 A I mean, I think semantically you're on the  
10 right track there. I think I would probably -- I  
11 would phrase it slightly differently which is to  
12 say -- I think in some sense -- as we said before,  
13 there's sort of three parts, if you will, to the  
14 second part of Paragraph 7.

15 There's the front end part, which we've  
16 just been talking about. There's the corrective  
17 disclosures and the event study. The second and  
18 third are slightly intertwined in the sense that  
19 there are issues with some of the calculations about  
20 the abnormal returns and the drops, but let's set  
21 those aside for purposes of your discussions and say  
22 there are at least a couple days that have a  
23 statistically significant negative return.

24 So this middle clause is really focused on  
25 what does that mean and one can imagine -- and I

1 discussed this I think in an earlier hypothetical in  
2 my report -- that sometimes you have what I think is  
3 sort of inarguably at least on its face a corrective  
4 disclosure where the company itself might have said  
5 earlier, hey, we got this wonderful contract, and  
6 then stock price goes up, people buy the stock, then  
7 later they say oh, just kidding. We actually didn't  
8 get that contract.

9           The company itself makes the statement.  
10 It's pretty clearly factual the company has made it,  
11 stock price drops. That's, again, kind of a  
12 stylized -- probably idealized from a plaintiffs'  
13 perspective class action matter, kind of hard to,  
14 again, in that hypothetical to sort of imagine that  
15 there's not some problem there.

16           So what I say here is yeah, sure, there's  
17 some back end stock price drops. I disagree  
18 somewhat with the event study. I disagree that  
19 these are all the days, although Dr. Hartzmark and I  
20 both find, you know, the equity days not to be  
21 statistically significant, but I agree that they  
22 fell.

23           The big difference in my mind is more of a  
24 framing and causal issue, which I think your  
25 question was getting to or your kind of phrasing of

1 it, which is to say this isn't the company itself  
2 saying guess what, we did a whole bunch of cramming  
3 and either we have to, you know, restate financials  
4 or we're going to have to pay huge money back or  
5 some form of that. These are lawsuits, right.

6 And in my mind that's not the same. And I  
7 don't disagree that the stock price went down and  
8 I'll just accept for discussion purposes that it  
9 went down related to that news, but if that news is  
10 simply the filing of lawsuits and allegations this  
11 could be happening -- and, of course, this is an  
12 environment of a Wells Fargo heightened concern  
13 about issues like cramming and opening accounts and  
14 things like that, that's not the same. That's not  
15 actually a company disclosure of information.

16 And I think that's a key issue on these  
17 back end disclosures that I think has not been  
18 addressed -- well, again, there's no model per se.  
19 It's really just a description by Dr. Hartzmark of  
20 how to do high level research, but it's certainly  
21 not something that's been addressed by Dr. Hartzmark  
22 or the plaintiffs how to think about a stock price  
23 that's dropping as a result of, again, allegations  
24 or lawsuits or things like that.

25 And I think that's sort of the -- that's

1 kind of the key issue in some sense on those back  
2 end corrective disclosures.

3 I realize that was a long answer but  
4 hopefully that gave a little color around your  
5 description.

6 Q It was helpful.

7 So and, again, I hate to go back to the  
8 elevator version, but, again, what you're saying is  
9 that because of the nature of the disclosures, you  
10 know, it's really not clear if they caused the stock  
11 to decline?

12 A That's -- I'm being a little -- I'm sort of  
13 waffling a little bit on there just thinking about  
14 it out loud.

15 I haven't -- put it this way: I haven't  
16 done an analysis to say was there other information  
17 on those days that also caused it to -- the stock  
18 price to drop.

19 So that may well be an issue and that's  
20 sort of a form of what we were discussing before.  
21 But I think to the extent -- let's just accept in a  
22 more hypothetical sense that that was the only thing  
23 that happened and there's no dispute about the fact  
24 that the filing of the lawsuit, that did -- you  
25 know, following those the stock price dropped.

1 I think the problem with that from an  
2 economic perspective and a damages model perspective  
3 is that's not the same as a revelation of an actual  
4 truth. That's -- you know, you can certainly  
5 imagine especially in this Wells Fargo environment  
6 that that reflects concerns about oh, maybe there is  
7 something out there.

8 And I discussed this quite extensively in  
9 my report and I looked to equity analysts as to say  
10 is this a substantive disclosure that would truly  
11 suggest that the discounted value of the future cash  
12 flows has meaningfully changed, or is this more  
13 likely a signal of potential concern but not  
14 something that's an obvious driver of fundamental  
15 economic value here.

16 And my conclusion is it's much more of the  
17 latter, that it's -- that it's not an allegation  
18 that we didn't get the contract. It's -- there's  
19 nothing in it that was new in concept. Allegations  
20 of cramming and billing concerns have been around  
21 for a long time. But in that environment of Wells  
22 Fargo it's obviously a concern of oh, maybe there's  
23 something here, but -- but it's no more than that.

24 Q I'll follow up on your statement there. So  
25 you're not suggesting -- you said it's not new in

1 concept. You're not suggesting that the  
2 whistleblower lawsuit that was filed on the  
3 corrective disclosure was known sometime prior to  
4 that date, right?

5 A That's correct. And I'm surely not saying  
6 that the market somehow knew six months before that  
7 Ms. Heiser was going to file a lawsuit or had a  
8 draft of it or anything like that. I'm not aware of  
9 anything like that.

10 It's a more general statement that in kind  
11 of consumer facing businesses like this, and this  
12 being, you know, telecom, Internet, consumer  
13 services, all of that, these are very common  
14 allegations. I myself have been involved in cases  
15 involving these kind of things, so...

16 Q In those cases --

17 A You cut out. I don't know if your -- I  
18 missed the first few words of that.

19 Q I was saying -- can you hear me?

20 A I can hear you, yes.

21 Q Yeah.

22 You weren't a defendant in those cases,  
23 were you?

24 A No. No. Fortunately, I don't know if this  
25 has been your experience as well, as someone who

1 spends their life dealing with disputes all the  
2 time, I've actually -- knock wood, I've never  
3 actually been a party to one, so, no, no, this is in  
4 my expert capacity. Thanks for clarifying that.

5 Q Right. So, again -- but you're not saying  
6 that Ms. Heiser's lawsuit, the facts contained in  
7 that lawsuit, the other information disclosed on  
8 June 16th was publicly known or somehow existed in  
9 the market prior to that time?

10 A Again, I agree with that certainly as to  
11 the specifics. I'm not aware that Ms. Heiser's  
12 lawsuit or even any of the subsequent lawsuits that  
13 are referenced in the Complaint, that those -- that  
14 specific information about those specific lawsuits  
15 was known.

16 Q Got it.

17 And then certainly the same is true of the  
18 July 12th corrective disclosure, you're not  
19 suggesting that investors were aware of the  
20 investigation by the Minnesota attorney general or  
21 the, you know, facts set forth in the Complaint that  
22 they filed prior to July 12th of 2017?

23 MR. BLAIR: Objection. Object to the form.

24 THE WITNESS: I would certainly agree to  
25 the last part of that because, again, I have no



1 reason to think that investors knew about the actual  
2 filing of the lawsuit.

3 I don't actually know about the first part  
4 of your statement, which is was it -- was there  
5 knowledge that there was some investigation going  
6 on. I don't know that. I don't think it really  
7 changes your question, as I understand the specific  
8 things pointed to is the actual filing of the  
9 lawsuit.

10 But I just -- I don't want to imply that I  
11 know more than I do know about what was public about  
12 that Minnesota situation.

13 BY MR. BLATCHLEY:

14 Q Yeah. So I just want to clarify that.

15 So did you look at whether there was any  
16 public indication of the Minnesota attorney  
17 general's investigation prior to July 12th?

18 A I don't -- the answer is no in the sense I  
19 don't specifically recall any information about it.  
20 I think -- I do cite something -- as I recall, I  
21 cite something else in Minnesota, I think  
22 Senator Klobuchar's, but I think that may be  
23 something, you know, different, as I recall.

24 But I'm not aware -- certainly, Mike, I'm  
25 not aware of any -- I didn't specifically analyze

1 what that lawsuit -- and that's not really my -- my  
2 contention isn't that that -- anything specific  
3 about that was known. That's not my -- my view.

4 Q Okay. And then certainly if there was  
5 anything, it would be in your Appendix B. And  
6 assuming there's nothing in Appendix B concerning a  
7 Minnesota investigation prior to July 12th, we're on  
8 the same page?

9 MR. BLAIR: Object to the form.

10 THE WITNESS: I think I agree with that.  
11 I'm not aware of anything in Appendix B that would  
12 suggest that it was, but I don't recall or I don't  
13 remember specifically looking for that.

14 BY MR. BLATCHLEY:

15 Q Yeah. Investors in the public didn't know  
16 about a lawsuit before -- the filing of the lawsuit  
17 before it was filed. How about that?

18 A Were you stating that specific -- I mean, I  
19 think I could probably answer it more generally if I  
20 understand your question is I'm not -- I'm not  
21 contending or I don't have any information to  
22 suggest that investors knew about any of the  
23 specific lawsuits that are mentioned in the  
24 Complaint prior to them hitting the press release  
25 times and things like that.



1 I'm not -- this isn't the sort of oh,  
2 that -- that information, specific information was  
3 leaked two weeks before or anything like that. I  
4 don't -- I suppose that's possible but that's not  
5 what I understand to be the facts.

6 Q Okay. And so, again, on -- let's just --  
7 June 16th, setting aside June 19th for the moment,  
8 and July 12th, of the three dates, the corrective  
9 disclosure dates.

10 Are you with me on that?

11 A So we're talking about the first and the  
12 third?

13 Q Yeah.

14 A Yeah.

15 Q And did you agree with Dr. Hartzmark that  
16 there was a statistically significant stock price  
17 decline on those dates following the corrective  
18 disclosures?

19 A Yes, I think, is the answer to that. Give  
20 me a second. I just want to get to my table  
21 summarizing that.

22 I've got a table -- or a figure here. My  
23 analysis is -- let me see here. Here we go.

24 Yes. I'm on Figure 12 just to reference  
25 that on Page 85. So both Dr. Hartzmark and I find

1 statistically significant negative abnormal returns  
2 on June 16th and July 12th.

3 Q And so, again, your opinion referring back  
4 to Paragraph 7, that second clause, what you're  
5 really talking about is your opinion about the  
6 Wells Fargo environment making it difficult to  
7 determine whether those disclosures are actually  
8 responsible for the stock price declines as a  
9 measure of investor's harm.

10 Is that an accurate way to say it?

11 A Put it this way: I certainly agree that  
12 the Wells Fargo environment is a factor that has to  
13 be considered here. That it has created a  
14 heightened awareness and potential concern about  
15 consumer-based companies, so I agree with that.

16 That said, I think the -- there's also a  
17 more general concern here about the idea that can  
18 the filing of a lawsuit with allegations, is that  
19 itself truly a corrective disclosure, you know, or  
20 is that simply -- even if we all agree, oh, that  
21 moved the stock price, that people were worried that  
22 oh, my gosh, a \$12 billion lawsuit, what if that's  
23 even ten percent likely to be true, you know, the  
24 stock could go down.

25 But that's not the same as revealing the

1 truth that there actually were underlying problems  
2 of the scale that would cause anything like the  
3 stock price movement.

4 So I certainly have broad concerns as an  
5 economist and as someone who does, you know, damages  
6 calculations that the third party allegations of  
7 something that cause a price to drop, there's sort  
8 of a circularity of oh, well, then that is a  
9 corrective disclosure.

10 I mean, at the extreme that would mean any  
11 lawsuit that got filed that caused the stock price  
12 to drop should be thought of as a corrective  
13 disclosure, and kind of assumes to be true, and I  
14 said that's not the right framework economically, I  
15 think.

16 Q And, again, what you're saying is you  
17 dispute whether it's actually corrective. Is that a  
18 good way of saying it?

19 A Certainly at eye level I think that is  
20 true, that is the filing of a lawsuit with  
21 allegations in it, is that -- should that be thought  
22 of as a corrective disclosure. I mean, which I  
23 realize is not just an economic question. As an  
24 economist I have views on that, but I do -- in my  
25 view it's also a larger question.

1 Q Okay. So just moving on to kind of the  
2 third clause of that -- of that sentence. You say  
3 that there's -- you know, plaintiffs haven't put  
4 forward a model capable of reliably -- reliably  
5 measuring common inflation.

6 Am I -- am I reading that accurately?

7 A Yes. I agree. Are you talking about the  
8 "nor" part of that?

9 Q Yeah.

10 A Yes.

11 Q Okay. And so --

12 A I agree that -- let me say basically there  
13 is no model per se, so...

14 Q Yeah.

15 A Yeah. You know, in that almost  
16 definitionally it's not going to be -- if there's no  
17 model it's not capable of doing that.

18 Q And you haven't put forward in this opinion  
19 of yours an alternative damages model, right?

20 A Well, again, I think we've been talking  
21 about this so I'm happy to keep talking about it.  
22 But, you know, we talked a lot about the front end  
23 of it, that I don't -- as I do my analysis and my  
24 experience, I don't see how it can be done.

25 So I don't think -- I haven't put together

1 a model but it's not because I just didn't even  
2 think about it. I didn't -- I don't think it can be  
3 done.

4 On the back end disclosures that we're  
5 talking about here, again, I'm not putting forward a  
6 model quote/unquote on the back end disclosures, but  
7 that's largely because of the sort of framing  
8 concerns about -- that we've just been talking  
9 about, that is there even a starting basis to think  
10 that these should be thought of as corrective  
11 disclosures.

12 Again, I've done the event study. I see  
13 the statistically significant abnormal return. I  
14 don't -- I'm not -- I mean, I'm disputing that in  
15 the sense that the specifics of how to do it and  
16 there's the days and that, we'll presumably talk  
17 about that, but I have a more fundamental problem  
18 with that.

19 I haven't put forward a model but largely  
20 because I don't see that a model is really  
21 appropriate here, certainly not without something  
22 tying the -- these allegations in these lawsuits to  
23 something more substantive that would really be an  
24 underlying economic driver of the value of the price  
25 of the CenturyLink stock.

1 Q You're not contending that -- so when one  
2 files a lawsuit, right -- lawyers file lawsuits. Is  
3 that -- do you agree with that?

4 A I -- I agree with that. Some of them more  
5 than others, but, yes, that is something that  
6 lawyers do.

7 Q And when they file them, the allegations  
8 set forth various facts generally?

9 A I -- I certainly agree that there's lots of  
10 statements in Complaints, many of them characterized  
11 as facts, yes.

12 Q And there are Complaints that contain  
13 facts?

14 A Oh, yes. Sure. I mean, your Complaint  
15 contains facts.

16 Q Numerous facts?

17 A That, I don't dispute. Yes. It's not a  
18 complete house of cards, I agree with that.

19 Q Right.

20 A We're setting aside the allegations or  
21 whatever, but like you said, the description of  
22 CenturyLink and all that, lots of facts in there.

23 Q Totally, totally fair.

24 And you would also agree with I guess the  
25 premise that lawyers are under ethical obligations



1 to investigate and, you know, be accurate in  
2 alleging facts in Complaints?

3 MR. BLAIR: Objection.

4 THE WITNESS: I'm sorry, Ryan. Did you  
5 have an objection?

6 MR. BLAIR: Yeah. Object to the form.  
7 You can answer.

8 THE WITNESS: Yeah. Well, it's probably  
9 more a question for the ABA and those. I mean, that  
10 said, I've been doing this a long time, so let's put  
11 it this way: It's certainly my understanding that  
12 one can include things you know to not be true, or  
13 probably even strongly suspect, although now I'm  
14 getting into gray areas in terms of what I actually  
15 know on that.

16 As to what level of investigation or belief  
17 one has to have? You know, I'm less familiar with  
18 the details of that. I certainly see many, many,  
19 many instances where that turns out not to be true,  
20 the allegations in the Complaint, so they're  
21 certainly not -- one shouldn't take them for the  
22 truth but I don't -- I do agree the high level you  
23 can't just -- I think you can't just make stuff  
24 up --

25 \\\

1 BY MR. BLATCHLEY:

2 Q Right.

3 A -- about it. That seems right to me.

4 Q Again, setting aside this case, in general  
5 there's certainly a level of -- maybe it's minimal  
6 in your view -- veracity of allegations in a filed  
7 Complaint?

8 MR. BLAIR: Object to the form.

9 THE WITNESS: You know, I think I probably  
10 said as much as I can say.

11 BY MR. BLATCHLEY:

12 Q Yeah.

13 A I don't disagree with the proposition  
14 they're supposed to be. You know, again, I've seen  
15 lots and lots of cases where it turned out to be,  
16 you know, pretty questionable or what the  
17 allegations are turned out to be exactly the  
18 opposite in some cases.

19 So -- but there's intended to be some form  
20 of that.

21 Q So you had just mentioned -- and maybe it  
22 makes sense to turn to this now, you talked about  
23 kind of -- you said it a number of times, the  
24 economic framework with which to view things in this  
25 case.

1           And if I could just turn your attention to  
2     Paragraph 53, I think that's the first time you kind  
3     of mention that term.

4           A     Paragraph 5-3?

5           Q     Yeah.

6           A     Yes.

7           Q     So, again, tell me what you mean in that  
8     first sentence, what's the economic framework  
9     supposed to mean here?

10          A     So, again, at the high level, the task, as  
11     I understand it at this stage, is to develop a  
12     damages model that is able to deal with all of the  
13     allegations and economic facts in the case.

14                So I think, you know, at the highest level  
15     the economic framework here, you know, is really a  
16     lot -- pretty well focused on the model. I use the  
17     term "economic framework" as opposed to saying  
18     "damages model" because I think there are a lot of  
19     things that feed into that question of what does a  
20     damages model need to take into account.

21                And, again, we've been over many of those  
22     already this morning. I'm happy to talk about them  
23     more. But they're really kind of focused on the  
24     core question of how is one going to calculate  
25     damages in a case like this and what are the

1 economic things that need to be understood.

2 And we talked about the parsing and the  
3 scaling and the identification of inflation and the  
4 statistically significant price increases or not  
5 there, so those are all part of the economic  
6 framework in my view.

7 We've just been talking about the  
8 corrective disclosures and the economic environment  
9 around Wells Fargo and the concerns about that, so  
10 that's part of the economic framework that has to be  
11 thought about.

12 And then obviously kind of the specific  
13 level of a model, as I've said repeatedly in my  
14 report and talked about, it needs to be -- have a  
15 methodology that can account for various potential  
16 outcomes in the case. In terms of whether some  
17 categories are ultimately included or not, I don't  
18 think at this stage one has to do the final precise  
19 calculations of damages, but it's my understanding  
20 that one needs to have a model that is thoughtful  
21 and complete and can be described as to is there a  
22 way in which one can do these things.

23 And, again, I think that hasn't been done,  
24 so it's really the model and the economic issues  
25 that feed into that model that I characterize as the

1 quote, unquote, economic framework.

2 Q Okay. So thank you for that.

3 The sentence -- second sentence is  
4 Dr. Hartzmark hasn't provided economic framework,  
5 which is all the stuff you just described, but  
6 rather he assumed the allegations to be true.

7 So are all those things really just a  
8 dispute about how much weight should be given to the  
9 allegations?

10 MR. BLAIR: Objection.

11 THE WITNESS: Sorry, Ryan. Once again, I  
12 talked over you. Did you have a specific objection,  
13 Ryan? I'm not sure if it got on the record.

14 MR. BLAIR: No. Just -- just to the form.  
15 You can answer.

16 THE WITNESS: Okay.

17 MR. BLAIR: You can.

18 THE WITNESS: Okay. Yeah.

19 No, I think is the short answer to your  
20 question. That reference there is really to what I  
21 understood from reviewing Dr. Hartzmark's report and  
22 his deposition to be his view that none of this --  
23 and by "this," I mean all of the discussion we've  
24 been having, about, you know, model development,  
25 being able to deal with parsing and scaling and the

1 52 days and the fact that the disclosures are  
2 lawsuits and allegations, as opposed to that,  
3 he's -- as I understand, he kind of washed his hands  
4 of that and just said someone is going to have to  
5 develop an inflation ribbon and I'm assuming that  
6 everything in the Complaint is true.

7 I don't think that's sufficient. I don't  
8 think that that's what's -- what I understand to be  
9 required at this stage.

10 BY MR. BLATCHLEY:

11 Q So, again, I'm sorry to keep harping on  
12 this, you're not saying -- you're not providing an  
13 opinion that the Complaint's allegations are not  
14 true?

15 A I think I agree with that in the following  
16 sense: I certainly haven't tried to go through  
17 every single allegation and do a complete and  
18 thorough analysis of every allegation to show  
19 whether the facts are supported or not.

20 But I have certainly done analysis to show  
21 the challenges that will be associated with doing --  
22 showing that, and the difficulty, if not the  
23 impossibility, of ultimately being able to identify  
24 those things.

25 So, again, for example, on the upfront

1 inflation, talked about all the different things  
2 that are associated on some of those days with  
3 metrics, and I said they're alleging that this  
4 caused inflation, but when you observe in 52 days  
5 that only four of them have a positive -- even a  
6 positive return, I think it's fair to say that  
7 raises real concern about whether or not one could  
8 ever show price impact on the front end, and those  
9 four days themselves have multiple allegations.

10 So I think I have done analysis that points  
11 to the complexity of the analysis or the  
12 impossibility, and certainly while not ruling out  
13 definitively that there's not a shred of truth in  
14 any of the allegations, I think that would be too  
15 strong a statement at this point.

16 But I do think what I've done speaks to  
17 issues of be it the truth or certainly the economic  
18 importance of some of the things in the -- in the  
19 Complaint. So, again, that's probably the best way  
20 to characterize that.

21 Q So just following up with that, was that  
22 part of your assignment, was to determine the  
23 veracity of the allegations?

24 A Again, I would say not specifically.  
25 Again, I certainly wasn't given the assignment "Hey,

1 Mr. Deal, I want you to go through the Complaint  
2 and, you know, list every single thing that's in  
3 there and run with it." That was not my assignment.

4 But I think my assignment kind of almost by  
5 definition is going to touch on those types of  
6 issues where I say well, my assignment is to analyze  
7 a damages model, and to think about damages in this  
8 case, which I think it is.

9 And there's essentially nothing that's been  
10 done by Dr. Hartzmark on that front, other than to  
11 say someone is going to do an inflation ribbon and  
12 I'll do the subtraction later, or someone else will  
13 do the subtraction later.

14 Then I think one does need to really do a  
15 fairly deep dive, which I've done, into the  
16 Complaint to understand well, what days are at  
17 issue, what are the alleged categories, to think  
18 about all those kinds of issues.

19 That's a slightly different assignment from  
20 what you said. And I agree that my assignment  
21 wasn't, you know, test all these things and give a  
22 thumbs up or a thumbs down as to the truth of them.  
23 But it does certainly touch on them in that way.

24 I'm showing frozen screen. Are you showing  
25 that again as well?



1 Q Yeah. I am -- I am as well. Should we  
2 continue or...?

3 A Again, I'm totally -- I'm totally  
4 comfortable continuing, if you are. I feel like our  
5 conversation is fine.

6 Q Okay. Yeah. So, again, thank you for that  
7 response. So, again, you're talking about --  
8 there's just a thing here I wanted to ask.

9 You say the reasonableness of the  
10 assumption of truth about the allegations, and what  
11 you were just describing you really -- is it an  
12 attack on that assumption? I mean, I just want  
13 to --

14 A Well -- I didn't mean to interrupt you.  
15 Sorry.

16 Q Sorry. I wanted to make sure I didn't lose  
17 you.

18 A I'm here. I should be showing up on -- I  
19 just clicked and got -- oh, there we go.

20 All right. This seems to be a somewhat  
21 regular occurrence on this, but that's all right.

22 Q Sorry. Let me start over.

23 A Do you have a little button that you're  
24 triggering it based on a response, meaning to turn  
25 off the video?

1 MR. BLATCHLEY: Ryan, are you the  
2 controller?

3 THE WITNESS: Ryan is not -- I have no  
4 reason to suspect that anyone is, you know,  
5 sabotaging the video here. Joke.

6 Anyway, I had an answer in my head there,  
7 but do you mind repeating your question.

8 BY MR. BLATCHLEY:

9 Q Yeah. You say it's important from an  
10 economic perspective to evaluate the allegations and  
11 identify the reasonableness of an assumption of  
12 truths.

13 And, again, this is going back to what you  
14 mean by the economic framework. I think you just  
15 answered that what you did to evaluate that  
16 assumption is to look at the dates when the false  
17 and misleading statements were made and assess them.  
18 You're looking at the corrective disclosures and  
19 what you refer to as, I guess, fraud.

20 And those things need to be considered  
21 before you can precisely come up -- or come up with  
22 a damages model. Is that an accurate way of saying  
23 things?

24 A Sorry. I got a little distracted by the  
25 thing going on and off. Let me try and respond to

1 it and see if I've got the right framework here.

2 I might -- I might answer that question in  
3 some sense by pointing to the last sentence on  
4 Page 53 there to give a little color around --

5 There. I think I'm back. There. Let me  
6 see if I can find you, Mike. There you are. All  
7 right.

8 So I think there's sort of two aspects to  
9 it. So the one is I don't think -- even if one  
10 says -- I'm just assuming everything to be true, I  
11 don't think that's sufficient. And I referenced  
12 that, that -- so I -- that is not in my mind -- in  
13 my experience, not just my mind, my experience and  
14 my understanding of the framework, that isn't enough  
15 to say I assume everything is true and say there's  
16 an inflation ribbon there.

17 There's a -- I think -- and this is your  
18 question, I think, was beyond -- beyond this is that  
19 deficient, is that warranted, and I have described,  
20 and that's what I do in the next, you know, several  
21 pages on this, to say this kind of fundamental idea  
22 that, you know, the statements were inflationary and  
23 that they contained information that wasn't known  
24 and similarly that the -- that the -- or they  
25 contained specific information that would cause

1 the -- cause inflation and that the back end  
2 disclosures contained information that wasn't known  
3 in the market previously, again, I say -- they're  
4 not necessarily warranted, not because I say I know  
5 for 100-percent certainty there's zero truth to any  
6 of the allegations. I'm not saying that.

7 But even if it were sufficient to assume  
8 the facts to be there, I say there's reason to think  
9 that either the facts are incorrect or that they  
10 missed the complexity of the economic environment  
11 and economic factors that need to be taken into  
12 account.

13 That may -- I fear that may not be exactly  
14 the answer to your question, but tell me if it is.

15 Q It's not but we'll move on.

16 So, yeah, you describe here, right,  
17 essentially whether it's reasonable for  
18 Dr. Hartzmark to assume the allegation in  
19 Paragraph like 5- -- just following along, 55, 56,  
20 and then 57, you conclude at 58, these are -- these  
21 are facts that he didn't consider that pertain to  
22 this idea that you can't just assume the allegations  
23 are true.

24 Is that -- is that fair?

25 A Yes. I think that is fair in the sense

1 that -- there's two parts of it. One is are they  
2 literally factually true and related to that, do  
3 they -- are they consistent with the economic  
4 framework that one needs to think about for damages.

5 So I think the way to illustrate that, if  
6 you don't mind if I give a little bit of an  
7 explanation there, we've been -- we talked a while  
8 ago about this -- the back end disclosures for a  
9 minute.

10 I think -- again, I'm not disputing that  
11 that information was known before. I don't have any  
12 reason to think that's true, so I'm not disputing  
13 that there was information about these lawsuits that  
14 came out. I don't think that -- you can assume that  
15 to be true. I don't think that there's really  
16 strong evidence that would suggest that's not true,  
17 that those lawsuits were filed.

18 But, again, I think that's not quite  
19 sufficient. It doesn't provide the full background  
20 of implicit in a securities lawsuit is the idea that  
21 this is new information that wasn't known and it's  
22 substantively something that would affect the price  
23 of the securities as opposed to other kind of  
24 factors.

25 And I think in some ways that's -- that's

1 certainly part of my critique. And in some ways I  
2 think at least with regards to the back end  
3 complaint, it's probably most of the critique, that  
4 this -- the broad concept of cramming and billing  
5 issues was well-known out there and we've talked  
6 about the fact that these are really allegations.

7           So it's a combination of those things which  
8 is why it's kind of characterized as economic  
9 framework as opposed to a detailed analysis of each  
10 allegation in there. It's not -- they're related  
11 but not the same thing.

12           Q     Okay. So thank you for that.

13                   And, again, these paragraphs that we're  
14 talking about, let me just put it this way: You're  
15 saying that there's a lot of information already in  
16 the market about these kind of activities, and  
17 therefore, you know, the corrective disclosures  
18 really can't be corrected because investors  
19 effectively know the truth already?

20           A     I mean, that would be the extreme form of  
21 the statement. I don't think I'm making quite --  
22 well, I'm not intending to make it quite that  
23 extreme. It's just to say it's not possible for  
24 information to have an effect but certainly the idea  
25 that -- the broader concept of -- well, put it this

1 way:

2 I think -- to think that investors would be  
3 assuming that there were not any concerns about  
4 CenturyLink's billing practices or cramming or  
5 really any other industry participants, I disagree  
6 with that.

7 I think there's plenty of information out  
8 there and people's individual experience would be  
9 sufficient to say there are going -- it's not a  
10 surprise. That's part of the normal course of  
11 business.

12 I think the real question is is there  
13 something beyond the normal course of business where  
14 there's always going to be certain disputes and  
15 things like that at some level.

16 And that's where I think you get into these  
17 concerns about the Wells Fargo environment and the  
18 fact that are these lawsuits which are coming on the  
19 heels of Wells Fargo, they're not disclosing -- it's  
20 not the first time the investors are aware that  
21 these are concerns.

22 These are obviously specific lawsuits that  
23 one might be -- I imagine the investors were  
24 concerned, you know, could be pointing towards a  
25 Wells Fargo, but that's the difference from saying

1 that's the truth of the matter.

2 Q So let me just focus on something a little  
3 bit more narrow here. So Paragraph 56 you're  
4 talking -- I guess 56, 57, 58, you're talking about  
5 cramming here.

6 Can you tell me what you mean by "cramming"  
7 in these examples?

8 A In these specific examples?

9 Q Yeah. When you reference cramming here,  
10 what do you --

11 A Yeah.

12 Q What do you mean by that? 55 you say the  
13 issue of cramming, what do you take that term to  
14 mean in the context of these paragraphs in this  
15 report?

16 A I mean, the high level I think cramming  
17 essentially involves concerns of unauthorized  
18 charges in billing, so it's not something the  
19 consumer agreed to.

20 That can obviously take some different  
21 forms as to whether are there services that I'm  
22 being charged for that I didn't think I signed up  
23 for, is the price different from what I understood  
24 it to be. So there can be variations but at the  
25 highest level it can be consumer unauthorized



1 charges.

2 Q So in Paragraph, I guess it's 56, these  
3 examples from beginning in 1999, I guess, over 20  
4 years ago, through 2014 and 2015 is your last bullet  
5 point, is that what you mean using the term  
6 "cramming"? Is that applicable to those examples in  
7 that paragraph?

8 A Yes. I think so. I think, again, it's a  
9 broader concept. It can -- I think it can take  
10 various forms in my experience.

11 So some of these would be specific to  
12 third-party type charges, for example, where I  
13 myself had problems with this. Well, you're  
14 probably considerably younger than I am so you may  
15 not have had problems, but back when we all had wire  
16 lines and landlines, you know, you'd sort of be  
17 looking at that and say wait a second. I didn't --  
18 what's this charge from this third party on here,  
19 and there were certainly lots of complaints about  
20 that.

21 As they opened up -- the wire line  
22 companies opened up their platform to third parties  
23 to be able to bill as your phone bill as opposed to  
24 having to separately charge you for the service.  
25 So, you know, that's one form of it, but it's not

1 the only form. There can obviously be things like  
2 hey, you charged me for call waiting. This is back  
3 when all these services actually had incremental  
4 costs to them. I'm dating myself a little bit. And  
5 I didn't sign up for that.

6 So, again, it can be third parties. It  
7 could be other services. It could be variations of  
8 those things. But in some of these examples I think  
9 are some of the third parties type things, but the  
10 general definition of unauthorized charges is a  
11 little broader than that, too.

12 Q So for my clarification, 56, are there any  
13 descriptions there that are not third-party  
14 cramming?

15 A Yes. I think like the second bullet, for  
16 instance, on there talks about phone companies can  
17 cram consumers by adding unauthorized charges for  
18 telephone services such as call messaging.

19 In my experience, call messaging would be  
20 something that the telephone company itself would be  
21 providing, so...

22 Q And that's from the 2000 report?

23 A Yes.

24 Q Okay. Do you understand plaintiffs' case  
25 to be about third-party cramming?

1           A       I don't believe that's true.

2           Q       You talked about -- let me put that another  
3 way. Is it fair to say that allegations of  
4 third-party cramming might not put investors on  
5 notice of other types of cramming?

6           A       If I understand your question, it's sort of  
7 a form of the fact that there have been concerns  
8 about billing and services for years, let's -- in  
9 the earlier years they may have been about  
10 third-party issues.

11                   The question is is that specifically  
12 putting consumers on notice that in a world where  
13 there's not third-party issues but there nonetheless  
14 can be "Hey, I didn't authorize this service" or  
15 "You gave me a triple play instead of a double play"  
16 or all kinds of variations, certainly at the highest  
17 level I think it does put investors on notice that  
18 there are concerns in these consumer-facing  
19 companies about, you know, unauthorized charges, I  
20 think in a broad category they're the same.

21                   Are they exactly the same, no, they're not  
22 exactly the same, but, again, in my experience and  
23 even like we just said, it wasn't only third-party  
24 services that were at issue before.

25                   And having worked on cases involving these

1 kind of issues over many years, I do think -- well,  
2 to put it in the extreme, I certainly don't think an  
3 investor in CenturyLink would say I'm shocked that  
4 there are allegations in the Heiser lawsuit that  
5 there was pressure to add services, not from third  
6 parties, but from the company itself.

7 I do think that investors would be on  
8 notice that there's certainly going to be concerns  
9 about unauthorized charges, even if they're not  
10 third-party charges, given all the history of these  
11 kind of companies.

12 Even if the allegations aren't the same  
13 exactly in terms of third party versus other things,  
14 but they certainly belong in the same family of  
15 concerns about unauthorized charges.

16 Q Have you done any analysis to determine the  
17 actual amount of cramming that was going on at  
18 CenturyLink during the class period?

19 A No is the answer to that. I do have  
20 analysis in my report about levels of complaints  
21 which I think speak to those questions, but I have  
22 not myself been asked to do an analysis of the  
23 incident, the frequency of complaints or of  
24 cramming, quote, unquote, unauthorized services.

25 I haven't done any independent analysis of

1 that. But, again, I do have information to speak to  
2 those questions in my report.

3 Q So just, for example, you haven't looked at  
4 any internal CenturyLink documents, have you?

5 MR. BLAIR: Object to the form.

6 THE WITNESS: Not that I recall or recall  
7 citing. I'd need to look at my Exhibit B or my  
8 Appendix B to see if there were any on there, but  
9 this is not a -- certainly at a high level this is  
10 not an analysis of the kind of internal operations  
11 of CenturyLink. That's not what I was asked to do.  
12 BY MR. BLATCHLEY:

13 Q I want to clarify it because I think it's  
14 important.

15 Have you looked at any internal CenturyLink  
16 documents dated during the class period?

17 MR. BLAIR: Same objection.

18 THE WITNESS: Just give me a moment here.

19 I think the answer is no, to the extent  
20 what you're referring to is any nonpublic  
21 information. I certainly have lots of analysis and  
22 listings of kind of CenturyLink documents, meaning  
23 earnings releases, things like that.

24 But I took your question to be have I had  
25 any access to nonpublic data or e-mails, things like

1 that. The answer is no.

2 BY MR. BLATCHLEY:

3 Q Okay. That was the question.

4 A Okay.

5 Q Thank you for clarifying it was nonpublic  
6 information.

7 So you say in Paragraph 58 that, you know,  
8 Dr. Hartzmark hasn't shown how the corrective  
9 disclosures -- I think that's what you mean -- were,  
10 in fact, internally different than concerns in  
11 history, the instances you cite in the preceding  
12 paragraphs.

13 Is that an accurate way to put it?

14 A Yes. I think I say pretty close to those  
15 words in the last sentence on Page 34.

16 Q So beyond listing these examples, right,  
17 that you have in Paragraph 56, 57, did you read all  
18 these articles in connection with this report?

19 A Did I personally read every word of every  
20 article? No.

21 Q Okay. So what did you do to evaluate the  
22 differences between these instances and the  
23 corrective disclosures?

24 MR. BLAIR: Object to the form.

25 THE WITNESS: I'm not quite sure I

1 understand your question.

2 BY MR. BLATCHLEY:

3 Q Maybe I'm asking it the wrong way.

4 You're saying that Dr. Hartzmark didn't do  
5 that. You yourself didn't do that either; is that  
6 right?

7 MR. BLAIR: Objection. Misstates  
8 testimony.

9 THE WITNESS: I don't think I'd quite agree  
10 with that. I mean, Dr. Hartzmark hasn't done  
11 anything about this, so that's -- I think other  
12 than -- well, I don't think he's really done  
13 anything with regards to this. He just sort of says  
14 I'm assuming everything in the Complaint is true.

15 I -- I -- I have shown, and we've just been  
16 discussing fairly extensively, the fact that there's  
17 certainly -- to the extent there's typically a  
18 premise in a securities case, that the corrective  
19 disclosure information was not known prior to that.  
20 I say well, in the larger sense that's not true  
21 here, that it certainly is not accurate to say that  
22 the disclosures would have been the first  
23 opportunity for investors to understand that there  
24 are concerns about unauthorized charges. That's  
25 absolutely not true as a premise.

1           And that's not -- again, the Complaint  
2           itself doesn't say those words, so I think it's  
3           important to understand that that's typically a  
4           premise of no public information, then oh, suddenly  
5           we discover that you didn't get that big contract,  
6           to go back to my hypothetical.

7           So what I'm pointing out is that kind of  
8           implied premise isn't there in this case. That  
9           doesn't mean, to the discussion we've been having  
10          for a while now, that it's not quite the same as  
11          saying the investors knew all the specifics of all  
12          the lawsuits. I don't think that's true.

13          But it calls into question the typical  
14          causal link of no public information, then oh, my  
15          gosh, they didn't get the contract out there. I  
16          don't -- I don't think that is well -- I don't think  
17          that's a justified assumption.

18          So then that leads to the question of -- of  
19          which I'm referring to here, of well, what is  
20          different, if anything, about these. Why -- why  
21          might one think these are something different from  
22          just normal course, right. You always get some  
23          complaints about that, and they've even been sued  
24          before, right.

25          And I note in my discussion that the Wells



1 Fargo type environment, which the Complaint itself  
2 clearly hangs its hat on the Wells Fargo type  
3 environment here, that that was an additional factor  
4 in the environment. There's been nothing that I've  
5 seen that suggests that this was a Wells Fargo kind  
6 of situation.

7 I haven't seen anything that Dr. Hartzmark  
8 has done or whatever that would say not only were  
9 these substance -- were these allegations in a  
10 lawsuit that this is Wells Fargo 2, but, in fact,  
11 that turned out to be true. They paid a gazillion  
12 dollars in fines. You know, there was a huge shake  
13 up in the company. I haven't seen anything to  
14 suggest that.

15 And that's where I say what's new about  
16 that besides the fact the environment and the  
17 heightened awareness. Dr. Hartzmark certainly  
18 hasn't done any of that analysis.

19 MR. BLAIR: Mike, we've been going 90  
20 minutes. Maybe it's a good time for maybe a little  
21 longer break than ten, I guess.

22 MR. BLATCHLEY: Yeah.

23 MR. BLAIR: On the left coast it would be  
24 lunch but I just wanted --

25 MR. BLATCHLEY: That's totally fine. I

1 haven't eaten. I can do that as well.

2 THE WITNESS: Like I said, I can weigh in.  
3 I wouldn't mind getting a bite to eat. I don't need  
4 a long time, I think, so I'm fine with like a half  
5 hour.

6 MR. BLATCHLEY: Ryan, do you want to  
7 just -- do you want to just e-mail and we'll get  
8 together by e-mail, like let's call it 45 minutes?  
9 Is that okay or do you want shorter?

10 MR. BLAIR: 30 or 45 works for us.

11 MR. BLATCHLEY: Okay. And I'll e-mail you  
12 guys if we're not obviously back together.

13 MR. BLAIR: Okay. Why don't we go off the  
14 record.

15 THE VIDEOGRAPHER: Okay. The --

16 THE WITNESS: I can offer up the idea if  
17 you only have 15 more minutes to go, I'm happy to  
18 stay on. Just a suggestion.

19 MR. BLATCHLEY: No. I got a little bit  
20 more. Sorry, guys.

21 THE WITNESS: Oh, well. Okay. A half hour  
22 for lunch is fine.

23 THE VIDEOGRAPHER: So the time is  
24 12:00 p.m. Pacific standard time. We are off the  
25 record.

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(Lunch recess taken at 12:00 p.m.)

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1 FRIDAY, APRIL 24, 2020;

2 12:55 P.M.

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5 BRUCE DEAL,

6 having been previously duly sworn by the reporter,

7 was examined and testified further as follows:

8

9 THE VIDEOGRAPHER: Okay. The time is now  
10 12:55 p.m. and we are back on the record.

11

12 EXAMINATION (resumed.)

13 BY MR. BLATCHLEY:

14 Q Mr. Deal, I'd like to just start by I think  
15 clarifying something you had said earlier, making  
16 sure I have a correct understanding of what you were  
17 saying.

18 So the question I have is is it necessary  
19 to have a statistically significant increase in  
20 price in order to show price impact?

21 A That's an -- that's an interesting  
22 question. I think -- my experience is in practice  
23 that it's not necessarily a requirement but it's the  
24 most common starting point in a situation, like in  
25 this case on the up side of inflation, looking for

1 increases, obviously on the down side of the  
2 corrective disclosures.

3 It certainly is a theoretical at least  
4 argument that, you know, the inflation or the  
5 statement itself might have otherwise inflated or  
6 otherwise deflated the stock price, but other  
7 factors caused it to go the opposite direction so  
8 you don't observe it.

9 That -- I mean, conceptually that can  
10 certainly happen. There's no, you know, kind of  
11 theoretical problem with that.

12 I think, again, my experience is as a  
13 practical matter that's very, very difficult to show  
14 and to identify that, so I wouldn't rule it out as a  
15 possibility, but, again, as a practical matter I  
16 find that to be typically a starting premise for any  
17 price impact analysis.

18 Q Okay. So the starting premise is not a  
19 requirement; is that right?

20 A I certainly don't think it's a legal  
21 requirement, necessarily, although I think  
22 there's -- some of the cases that I'm aware of seem  
23 to be suggesting that if you can't show price change  
24 in the perspective direction, that itself is -- I'm  
25 paraphrasing, strong evidence or whatever on it.



1 But I'm speaking more from a theoretical  
2 perspective, you can imagine news that otherwise  
3 would if it was the only thing known caused the  
4 statistically significant increase or decrease, and  
5 if there's a perfectly offsetting other information  
6 theory, I think in practice that's very hard to do.

7 Q So I guess I'm asking a little different  
8 question. Say the example that you just mentioned,  
9 the offsetting information, it's certainly  
10 possible -- or would you agree that it's possible  
11 that you could have a false statement together with,  
12 I guess we'll call it confounding information or  
13 some other statement that offsets the impact that  
14 the statement would otherwise have, would you agree  
15 that that's a possibility?

16 A Yeah. I think it's at least a theoretical  
17 possibility, sure.

18 Q And in that scenario you wouldn't expect to  
19 see a statistically significant increase in stock  
20 price?

21 A Not given the hypothetical you just said,  
22 which is a sort of perfectly offsetting news in the  
23 opposite direction. Almost by definition that  
24 wouldn't occur. So the real challenge, of course,  
25 is how do you identify the fact that the news that

1 you're focused on would otherwise have caused it.

2 It's a form of the same issue that we've  
3 been talking about of parsing out. It's kind of a  
4 in your face form of it in that if there's not even  
5 a statistically significant movement in the expected  
6 direction, I find again as a practical matter that  
7 sets the bar awfully high and I don't see anyway in  
8 this case it could be overcome.

9 Q So here's what I want to go through. So  
10 it's certainly a theoretical possibility, as you  
11 just said, that if you have offsetting information  
12 you wouldn't expect to see a statistically  
13 significant increase in the price even though there  
14 would be price impact, correct?

15 A Yeah. Before I answer the question, you're  
16 a little quiet to me. I don't know if you are to  
17 other people. I don't know if there's a way to get  
18 a little closer to the mike.

19 Q Let me -- sorry. Let me -- is this better?  
20 Can you hear me?

21 A Yeah. I can hear you and that is a  
22 little -- a little bit better for me. Thank you.

23 But I think your question was with the sort  
24 of -- you know, is it possible that there's price  
25 impact given the presence of offsetting information



1 effectively. I think it's a -- if I understand the  
2 question it's essentially the same question, to say  
3 could there be -- if you had a method that you could  
4 identify that had this news come out on its own, it  
5 would have had a price impact, but, again, it was  
6 offset by some other information there, again,  
7 theoretically, sure, I think that's possible.

8 And in that case, I don't know the case law  
9 so there's a -- there's sort of another branch of it  
10 but from a legal standard of what -- and I can't  
11 really speak to that, but as an economic proposition  
12 it's at least theoretically possible.

13 Q Got it.

14 Okay. So, again, let's just maybe take  
15 your contract example, right. You're talking about  
16 you falsely announce a contract and that causes the  
17 stock to go up. Say the next quarter you say the  
18 contract is doing just fine, right.

19 In that example there's a false statement,  
20 right? You're with me on my hypothetical?

21 A Yeah. The premise is that there really  
22 never was a contract, as I understand your  
23 hypothetical.

24 Q Right. Yeah.

25 And, you know, the company reports results



1 that are totally in line with expectations. In that  
2 scenario you wouldn't expect to see a statistically  
3 significant stock price increase, would you?

4 A I think what you're describing is sort of  
5 what sometimes people refer to as a price  
6 maintenance sort of situation, where if there was  
7 some initial inflationary and you kind of repeat the  
8 same information effectively, we wouldn't  
9 necessarily -- it's not new news to the market at  
10 that point in time, so we wouldn't expect that news  
11 on its own -- to the extent it's essentially just a  
12 repetition of previous expectations, I wouldn't  
13 expect that to move the price, if that's your  
14 question.

15 Q And so we'll take that.

16 And then the next example is an event,  
17 let's say, building on kind of the first  
18 hypothetical, you know, the next -- the next  
19 quarter, you know, analysts have their estimates,  
20 and you have the contract that doesn't exist, but  
21 the company also truthfully discloses that its like  
22 major manufacturing facility has this huge fire and  
23 the stock -- would you expect in that case, this  
24 negative information, could have a, you know --  
25 could decline -- could cause a stock price decline,

1 even a statistically significant one, and there  
2 could still be price impact?

3 A Let me just repeat that. So I got the fire  
4 part of the hypothetical. Are you saying on the  
5 same day they also disclosed that -- when they  
6 disclosed the truth that they never had the  
7 contract?

8 Q No. They're lying about the contract  
9 again.

10 A Well, I guess -- I think it's sort of back  
11 to the same example. I think what you're describing  
12 is a form of the price maintenance, that with the --  
13 with the fire it goes down and you expect that to go  
14 down, but for that there's not, let's say in a  
15 perfect world you're able to figure that out. Okay.  
16 That's the only thing that moved it and it moved it  
17 exactly what you would expect and therefore --

18 Again, I think it's price maintenance. To  
19 the extent there's a price impact, again, I think  
20 you're sort of stepping over the line a little bit  
21 into legal territory a little more than economic  
22 territory.

23 I mean, I agree as an economist that had  
24 you disclosed that you didn't have a contract, we  
25 would expect it to go down. You repeated the same



1 false information so nothing happened. It wasn't a  
2 change in expectations. Whether that qualifies as  
3 quote/unquote price impact is I think essentially  
4 kind of a legal question. But, again, I agree that  
5 but with different news the price could move.

6 Q And, again, I guess just so I'm clear, you  
7 agree to the premise that -- I don't want to comment  
8 with counsel that you could have a significantly  
9 significant decline, say the fire example, you could  
10 introduce another false statement on that date, say  
11 we got another new contract, when you really didn't,  
12 and the overall price decline could be statistically  
13 significant in a negative direction, but there could  
14 still be price impact based on that false statement.

15 Do you agree with that?

16 A I think I followed your -- your somewhat  
17 increasingly complicated hypothetical, but I think  
18 you're stating it as clearly as you can state it so  
19 I'll give you credit on that.

20 Again, I think the answer is yes, in that  
21 what -- the challenge, of course, is being able to  
22 identify and measure that price impact. But from a  
23 conceptual perspective, you know, super bad news  
24 that dropped the stock price, combined with a lie  
25 that should have increased it by a bit, you know, it



1 may be kind of initially mapped in there by the big  
2 drop, but one has to propose a method to actually  
3 show how you would parse that apart.

4 I think it's easy to just sort of  
5 theoretically say that that's true. It's very  
6 difficult to actually do that. But I don't  
7 disagree, it's conceptually possible.

8 Q Okay. And like you just mentioned, it's  
9 very -- or you were saying it's difficult to parse  
10 those different effects out, and that's not  
11 something you attempted to do here in your report,  
12 right?

13 A I certainly didn't attempt to literally do  
14 the parsing and quantify that.

15 I did do things related to that as we  
16 talked about to identify the confounding information  
17 on days I did -- again, I did do the initial event  
18 study to identify kind of the starting point of how  
19 many days even went up, versus these four it went  
20 down, which is eight, versus which no significant  
21 change, which is the remainder, so all these things  
22 speak to that but I didn't literally do the parsing.

23 Q Okay. And just one last point. I think  
24 you're going to agree with it. I don't think it's  
25 controversial. Suppose in our, again, hypothetical

1 example we falsely mask the contract on day one --  
2 let me try something else. Bring us back to our  
3 contract example.

4 Say my contractual partner, Company B,  
5 announces -- falsely announces that we got a  
6 contract and Company A, our company, that we were  
7 talking about, their stock inflates in response to  
8 that news. And you have the next quarter  
9 Company A -- let me just do this again.

10 Company A affirms the false contract. You  
11 wouldn't expect a statistically significant increase  
12 in price in that example, would you?

13 A I think the answer is I wouldn't expect it,  
14 but just to make sure I get your hypothetical, your  
15 partner announces it, you don't deny it in quarter  
16 one, both -- both stocks go up.

17 The next quarter you again -- you may  
18 affirmatively say yeah, I mean, it's a lie but you  
19 say yeah, we do have this contract out there.

20 Q Yeah.

21 A With the market having already  
22 quote/unquote baked into the price --

23 Q Yeah.

24 A -- the expectation that you got it, I  
25 wouldn't expect to see an incremental change unless



1 there was some -- it was a bigger contract --

2 Q Right.

3 A -- or something like that, but if it's just  
4 literally a repetition of the news, even if they  
5 didn't make the original false statement but didn't  
6 make the denial of it, the market may well have  
7 learned of it that way.

8 Q Okay. So let's say in our hypothetical --  
9 I'm trying to think.

10 So we have -- we have a contract and we  
11 truthfully have the contract and we announce the  
12 contract. And the following in between quarters the  
13 contract is broken by our partner and it turns out  
14 they're suing us.

15 It's a total disaster and we're filing our  
16 annual report the next quarter, and it requires us  
17 to disclose literally that fact and we don't say  
18 anything, would you expect a material increase in --  
19 I'm sorry, a statistically significant increase in  
20 price based on that omission?

21 MR. BLAIR: Object to the form.

22 THE WITNESS: I -- I think I understand  
23 your hypothetical. I think you meant decrease but I  
24 understand the point.

25 It's sort of you have the truth. This

1 contract has fallen apart. You're positing a legal  
2 obligation to tell people that and you don't. I  
3 wouldn't expect at that point -- the market is still  
4 operating under the understanding that you do have  
5 it until you actually disclose it, so I wouldn't  
6 expect it to drop until somehow it's disclosed.

7 BY MR. BLATCHLEY:

8 Q And in that impact the false -- sorry, the,  
9 I guess, the actual admission would have a price  
10 impact, it just wouldn't be reflected as a  
11 statistically significant increase in price?

12 A Again, under your hypothetical you would  
13 never expect an increase in price. I think you're  
14 talking about the opposite, a decrease in price,  
15 right.

16 Q I was -- I think we might be passing each  
17 other.

18 No. That's the point. It's not -- I'm  
19 talking about the impact from the false statement.

20 A I thought in your statement it was the  
21 market knew we had a contract, the contract falls  
22 apart. When the market learns the truth of that, I  
23 expect the stock to drop.

24 Q Yeah. Sorry. Let me clarify.

25 We have the contract. We truthfully have



1 it. We announce it. Our stock price has gone up.

2 A Yeah.

3 Q During the quarter the contract falls  
4 apart. It's a disaster. We're required to disclose  
5 those facts in the following quarter. We don't  
6 disclose those facts. Okay.

7 A Right.

8 Q Would that failure to disclose, that  
9 omission, be expected to cause -- all else equal, be  
10 expected to cause a significant increase --  
11 statistically significant increase in price?

12 A I think the answer is no. I think the way  
13 you're phrasing that -- it's sort of if they had  
14 done what they were supposed to do, it would have  
15 gone down? It does go down but you're asking do I  
16 expect it to go up, no, I don't expect it to go up  
17 in that case because it's essentially not changing  
18 the mix of information.

19 Q And you're saying -- again, the premise of  
20 a lot of your opinion is that there's a physical be  
21 it quantifying or measuring that mix of information.

22 Is that a fair statement?

23 A I certainly agree with that, that there's a  
24 lot of information. You have alleged 55 days of  
25 inflation, 52 of which where they expected to move



1 the stock price five categories and so forth. On  
2 each of -- those days have lots of other information  
3 out there, so, you know, a form of your hypothetical  
4 is to say do I observe, you know, the first day --  
5 the first information going up, and then all the  
6 rest of them are simply repetitions of exactly the  
7 same information, so I wouldn't expect it.

8 I don't think that's how you pled your  
9 case, but conceptually that would be a form of it.  
10 But I'm just saying that we don't observe those  
11 incremental inflation occurring from those other  
12 days.

13 Q Okay. And so -- and, again, your -- that  
14 Figure 5, 18D I think it was, I think that was the  
15 one you were just referencing, what you were doing  
16 there is taking from plaintiffs' Complaint what you  
17 believe will be the inflationary dates where you  
18 would expect that inflation. Is that -- can I -- is  
19 that accurate?

20 A I am taking --

21 Sorry, Ryan. Was that an objection?

22 MR. BLAIR: Yeah. Objection to form.

23 THE WITNESS: Okay. I don't mean to  
24 suggest that you should be objecting if you're not.

25 MR. BLAIR: No. Don't worry.

1 THE WITNESS: There are times I do join in  
2 the objection, though.

3 Anyway, I agree with you that I'm going  
4 through the Complaint, I'm identifying the days. I  
5 think to the extent the totality of those days is  
6 the inflation out there, I'm saying let's take a  
7 first step to analyze do I even observe the stock  
8 going up by a statistically significant positive  
9 amount? I see it going down more than up, but  
10 mostly not changing. And then I look at the  
11 complexity of the information, so it's certainly  
12 complex.

13 And the second part is to say having seen  
14 that pattern of only a few positives and more  
15 negatives than that, this is a -- in my view with  
16 this evidence, this is going to be extremely  
17 difficult or I don't really see how it's going to be  
18 possible to do it out there.

19 So that's the -- that's the combination of  
20 the two things I've done.

21 BY MR. BLATCHLEY:

22 Q It's really just your criticism of the lack  
23 of kind of detailed damages model or -- is that --  
24 is that fair?

25 A I agree that there has not been a detailed

1 damages model, and I agree that I think you're  
2 saying that a detailed damages model would need to  
3 do that.

4 So, for example, in your hypothetical  
5 finding a way to say I see that the stock price  
6 actually goes down but yet really this inflation  
7 part of it actually would have caused it to go up.  
8 That's theoretically possible. Extremely difficult  
9 in my experience and certainly nothing that's been  
10 proposed in this case.

11 Q And, again, just going back, you know,  
12 you're saying it's difficult based on plaintiffs'  
13 allegations, right?

14 A Well, I mean, plaintiffs' allegations play  
15 into it. I suspect, though, you could have a  
16 different theory with somewhat different  
17 allegations, but if the same broad fact pattern  
18 holds it would also be extremely difficult.

19 So it's not just this, if I'm following  
20 your question.

21 THE VIDEOGRAPHER: Pardon me.

22 Mr. Deal, could you please pull your screen  
23 down slightly because I'm kind of losing you. There  
24 we go. Thank you very much.

25 THE WITNESS: You're welcome.



1 BY MR. BLATCHLEY:

2 Q Maybe I'll ask it -- sorry. Ready to go?

3 A I'm ready, yeah.

4 Q Okay. So let me -- you keep referring to  
5 the complexity of the damages model here. What do  
6 you consider complex versus simple?

7 A Yeah. That's probably a good question. I  
8 mean, simple would probably be the beginning of our  
9 hypothetical that we've been working with for a  
10 while of a fact pattern of a clear statement of  
11 inflation that causes a statistic -- positive  
12 statistically significant increase in stock price.

13 That persists for a while and then a clear  
14 single revelation of the truth by the company, let's  
15 say, or maybe not even the company but something  
16 that is clearly the truth, if the partner says the  
17 thing fell apart or the company does but it's not --  
18 it doesn't always have to be the company but it's  
19 not a dispute, it's not just an allegation, it's not  
20 just a lawsuit, it's not whatever. So I would say  
21 that's sort of a stylized simple. And I've been  
22 involved in cases that have somewhat more of that  
23 type of pattern in them.

24 I think to the heart of your question, the  
25 complex point is when you have multiple inflation

1 days, multiple disclosure days, multiple things  
2 happening on each day, where the disclosure itself  
3 isn't a clear factual revelation but, again, is more  
4 of an investigation, allegation of the lawsuit,  
5 things like that, and where you don't have  
6 intermediate, during the class period, variations in  
7 the inflation, and I guess the last one on top is  
8 where it kind of is a single allegation.

9 So I would say this case checks every  
10 single box in the opposite direction. To say is  
11 this more like Bruce's simple case or is this more  
12 like Bruce's complex case, I'd say this one pretty  
13 clearly, check, check, check, check, check, this is  
14 complex.

15 Q So where would like Williams fall in?

16 A Well, as I said, I can't remember all the  
17 details of Williams, but what I can remember about  
18 it, it -- I don't recall it having this level of  
19 complexity or even really close to this level of  
20 complexity.

21 Q So, yeah, describe for me what that means.  
22 We talked about how complexity is introduced because  
23 there's a number of, you know, pieces of information  
24 that are disclosed, or what I mean by disclosed in  
25 this context, said made public on false statement

1 days, right.

2 Would that -- did you have a similar  
3 situation with that in Williams? Was there -- were  
4 there only false statements on -- during the class  
5 period, no other information that was not false?

6 MR. BLAIR: Object to form.

7 THE WITNESS: Yeah. We've already  
8 discussed the fact that certainly my recollection --  
9 well, I should say I honestly don't remember  
10 whether -- what I do recall is having to do some  
11 parsing, which we talked about.

12 I honestly don't remember whether that was  
13 parsing on the inflation side or parsing on the  
14 corrective side, but I remember -- as I said, I  
15 remember having to say well, if there was a positive  
16 increase or a negative, at least two things happened  
17 and we have to parse that apart, and we were able to  
18 find a method to do it in there.

19 So I would put it not at the very, very  
20 simple end because anytime in my experience that you  
21 have to do the parsing, it's going to be moving  
22 directionally towards complexity.

23 The more things that are announced, the  
24 more metrics, the harder that is to do. So it was  
25 moving somewhat in the direction -- you know, I -- I

1 don't have perfect memory as I said of all the --

2 BY MR. BLATCHLEY:

3 Q Yeah.

4 A -- allegations in the case.

5 But, you know, if you say one is Bruce's  
6 simple stylized, ten is about as complex as you can  
7 get, you know, it maybe was a two or a three or  
8 something like that. I mean, it was not the  
9 simplest form but, you know, it was something that  
10 one could do on it.

11 I mean, here you've got -- well, I won't go  
12 through the long list. We've been through it many  
13 times, but you've got years of allegations and so  
14 forth, so...

15 Q Yeah. And then, you know, again, we've got  
16 three disclosure dates in this case.

17 Do you remember how many disclosure dates  
18 there were in Williams?

19 A I don't, no.

20 Q Any information that you were parsing, can  
21 you give me a ballpark of kind of the pieces of  
22 information that you were trying to calculate in  
23 that case?

24 A You know, again, I think I probably plumbed  
25 the recesses of the memory cells about as much as I

1 can do. I -- I have some memory of, again, some  
2 type of revenue information and something else, but  
3 that's -- that's stretching it to some form of that.

4 Q Do you remember how long like the class  
5 period was in Williams?

6 A No is the answer. I don't recall it being  
7 anything like as long as this one, but I just don't  
8 remember.

9 Q Okay. And then just so I understand your  
10 argument about complexity, are you saying that  
11 CenturyLink is a -- you know, you laid out in your  
12 Figure 5 that it's an information-rich disclosure  
13 date, you have in your Exhibit 6 that there's a lot  
14 of different financial metrics that were disclosed  
15 on false statement dates or inflation dates I think  
16 you called them.

17 Are you suggesting that that is, you know,  
18 abnormal in terms of, you know, companies in the  
19 telecom industry or more broadly?

20 MR. BLAIR: Object to the form.

21 THE WITNESS: That's a good question.

22 I think -- like take the second part of  
23 that question first. On the sort of -- on any given  
24 day, disclosure days, earning days, is it unusual  
25 for there to be, you know, dozens of different



1 metrics disclosed? Not particularly, I would say.

2 This company does have a lot going on in  
3 addition to just financial results. There were  
4 mergers at various points in time. There were  
5 reorganizations of their reporting. They did cash  
6 stock buyback. So I think they were at the complex  
7 end.

8 But it's certainly not unusual as a general  
9 proposition for numerous things to be disclosed on  
10 earnings disclosure days there. But even  
11 conditional on that in my experience this is even  
12 more than usual, but it's not like normally it's  
13 just one thing and here it's 40 things.

14 But, you know, you might find -- I'm just  
15 making this up a little bit, but, you know, a dozen  
16 things normally. In here we've got somewhat more.  
17 BY MR. BLATCHLEY:

18 Q Again, you said based on your experience  
19 this is a lot. You didn't do any other analysis to  
20 kind of compare this particular company with others  
21 in terms of, you know, the, I guess, information  
22 rich quantification that you did with respect to  
23 CenturyLink?

24 A Not in any statistical sense so I don't  
25 have the equivalent on my table showing on each day

1 how many different metrics, so, no, I don't have  
2 that.

3 But that's -- this is more based on my  
4 broad several decades of experience working on a  
5 variety of different types of cases, including  
6 securities cases and looking at what's being  
7 disclosed on quarters.

8 It's my experience that this is at the more  
9 complex end, but I haven't done a statistical  
10 analysis.

11 Q Right. And so I want to focus, I think  
12 what the relevant experience -- obviously you'll  
13 disagree with me -- is in the securities class  
14 action Section 10b class certification context.

15 So in that context, based on your  
16 experience, is this certainly -- again, same  
17 question, how is this abnormal and where does it  
18 fall along that complexity scale that you were  
19 mentioning?

20 MR. BLAIR: Objection to form.

21 THE WITNESS: I'm trying to follow your  
22 question. I'll agree with your advanced statement  
23 that I would argue that's not the only relevant  
24 experience here.

25 But conditional on that, the answer to your

1 question is this would fall onto the more complex  
2 end of those. And we just talked about Williams,  
3 for example, which is one where there was, you know  
4 some parsing involved. And this one is certainly  
5 more complex than what I remember of Williams. I  
6 don't remember all the details of it, but I remember  
7 enough to know that this was there.

8 I mean, I would say, you know, the Dell  
9 case that we were discussing a little earlier, too,  
10 this one is even more complex than that. There  
11 weren't nearly as many, you know, dates involved in  
12 that matter.

13 So the answer is it falls at the complex  
14 end of 10b-5 class security cases where I've had  
15 involvement.

16 BY MR. BLATCHLEY:

17 Q So, again, you're not holding yourself out  
18 as an expert in the complexity of securities class  
19 action classification, are you?

20 A I was answering your question. Is that --  
21 I mean, that's --

22 Q So, for example -- I'm sorry. Yeah. Let  
23 me rephrase that.

24 What I'm saying is we started talking about  
25 how CenturyLink -- you were saying CenturyLink has

1 certain complexities that other companies don't,  
2 there was a lot going on at the company, so -- and I  
3 was trying to say well, for example, take, you know,  
4 Wal-Mart, for example, is there more information  
5 disclosed by Wal-Mart on quarterly earnings  
6 announcement dates than CenturyLink? Have you done  
7 that analysis with respect to any other  
8 publicly-traded company, and if so, you know, has  
9 that informed your opinion here?

10 A And I think this is asked and answered but  
11 I'm happy to answer it again. So I haven't done any  
12 specific comparative analysis in this -- in my  
13 report other than to sort of just -- I mean, the  
14 numbers by themselves make it, I think, quite clear  
15 the complexity of this situation.

16 I'm telling you from my broad experience,  
17 which I thought was your experience, that this falls  
18 as -- my sense is any individual disclosure may be  
19 somewhat more complex for CenturyLink than others,  
20 because of its sort of -- again, it checks the boxes  
21 of a lot of the kinds of things that not every  
22 company has disclosed.

23 So, for instance, stock buyback, you know,  
24 mergers, you know, the financial results themselves,  
25 reorganizations of how they report things, those are

1 all -- in my experience, any one of those are some  
2 complexities and I see a lot of them in CenturyLink.

3 That said, my opinion isn't just based on  
4 oh, if only there were 20 things disclosed instead  
5 of 40 things disclosed, this would be a piece of  
6 cake. I think it's hard anyway.

7 And the real complexity, I think, or the  
8 additional complexity comes in the sheer number of  
9 days that you all have identified, the categories,  
10 you've identified five categories of things, you've  
11 identified this intermediate period that would have  
12 to be accounted for, so it's really the cumulative  
13 effect of all those things that I think is what  
14 really pushes it to the complex end of things.

15 Q So let me just -- again, I know we're  
16 talking about complexity. If it was on a scale, you  
17 think this is a ten.

18 A I wouldn't say a ten but it's pushing in  
19 that direction.

20 Q Okay. So I'm overstating. Good. Thank  
21 you for that clarification.

22 So you're not opining that you need a  
23 perfect fact pattern to do a damages analysis?

24 A I agree with that. I think that -- and I  
25 sometimes do see people sort of making that type of

1 a statement, and I disagree with that as someone who  
2 quantifies damages.

3 I think one has to do -- you know, you can  
4 quantify damages to a reasonable degree of certainty  
5 in many situations, even if you don't have perfect  
6 clarity on every issue.

7 Q So, for -- you know, one of the things you  
8 keep saying makes this case different is the  
9 uncertainty surrounding the disclosures. That's  
10 fair?

11 A Yes. In terms of sort of the nature of the  
12 disclosures themselves. It isn't like our contract  
13 is done, our plant burned down like we've been  
14 talking about. Lawsuits are fine.

15 Q Right. It's the -- one of those are  
16 sufficiently curative is basically what you're  
17 saying is the problem?

18 A I mean, when I say this, there's a lot of  
19 problems we've been talking about.

20 Q Right.

21 A But specific to disclosure dates, I  
22 think -- again, the broader environment has its  
23 Wells Fargo, you know, FUD, fear, uncertainty,  
24 doubt, and -- but focusing on your question, I do  
25 think the fact that these are just lawsuits is --

1 adds -- that in and of itself is a challenge in this  
2 case to which there's nothing in the damages model  
3 that would deal with that.

4 Q So let's talk about the fear, uncertainty  
5 and doubt for just a second.

6 Can you tell me where that comes from?  
7 What does that mean?

8 A Well, the first time I heard it was very  
9 early in my career in some of the Microsoft  
10 litigation where the competitor might try and create  
11 a fear, uncertainty and doubt about a competitor's  
12 product, for instance. Our word processor is great.  
13 You know, theirs has all kind of problems. There so  
14 you're kind of creating -- the first I heard of this  
15 acronym FUD, F-U-D, and -- but it was in this  
16 environment of, you know, I'm not sure if they're  
17 really going to be able to make their release, this  
18 new version, or will it fix the bugs, will it do  
19 those kind of things.

20 So it stems from that. But I think it's  
21 appropriate to think about it in this case as well,  
22 where Wells Fargo, I think, as they made actual  
23 disclosures of fines being paid, things like that, I  
24 think it's fair to say it was a significant issue at  
25 Wells Fargo.

1           And in that environment if one sort of  
2       creates an atmosphere to say this might look like  
3       that, meaning this situation might look more like a  
4       Wells Fargo, that would be using that situation and  
5       the uncertainty around it, well, maybe it is, maybe  
6       it isn't. Boys, if it's that, that's going to be  
7       bad.

8           It's that environment that -- and I think  
9       that's pretty clear in this case, that when I look  
10      at the actual press releases, when I look at your  
11      Complaint, there's a lot of references to Wells  
12      Fargo in there.

13           In my experience that would be, you know,  
14      kind of equivalent to where I first saw this decades  
15      ago.

16           Q     So let me just follow up on a few points  
17      there. The context in which you saw -- you're  
18      referring to Microsoft. Is that like the Microsoft  
19      antitrust matters? Am I right about that?

20           A     Yes.

21           Q     And just to be clear, that wasn't in the  
22      context of loss causation in a securities class  
23      action, right?

24           A     I certainly agree with that. I mean, I  
25      don't recall whether there was any securities class



1 action as part of that. I didn't personally work on  
2 any of those if there were.

3 But it's a much broader concept than  
4 something that's specific to securities class  
5 action, that's for sure.

6 Q Yeah. I'm just not familiar with it.

7 So, you know, it's helpful for the  
8 explanation. Again, it's in the antitrust context  
9 that you first learned of this term, and in that --

10 A Well --

11 Q Yeah. I'm trying to see what it means in  
12 terms of securities practices, because I've never  
13 heard the term used in connection with securities  
14 practices.

15 A Yeah. I mean, to be clear it's not an  
16 antitrust specific term by any stretch.

17 Q It's usually -- yeah.

18 A It may have come up in those antitrust  
19 cases as part of what are the competitive or  
20 allegedly anticompetitive practices of Microsoft.  
21 But it's a much more general concept of either  
22 creating fear, uncertainty and doubt, which was at  
23 least the allegation in Microsoft, that they  
24 affirmatively created these -- this environment.

25 It would be as if your firm -- and I don't

1 recommend you doing this, and I'm not suggesting  
2 that you do it, but if you were to say oh, Cooley,  
3 those guys aren't going to be around for very long.  
4 They got some really terrible attorneys, or I've  
5 heard that -- you know, it's that sort of, you know,  
6 kind of rumors or fear just kind of creating this  
7 environment where then you are able to capitalize on  
8 that.

9 I'm not alleging -- I'm not alleging. I  
10 sound like a lawyer. I'm not suggesting that, you  
11 know, you as the plaintiff lawyers or whatever had  
12 anything to do with Wells Fargo. But that's an  
13 example of an event that will create an environment  
14 of fear, uncertainty and doubt, even if it's not an  
15 intentional -- initially an intentional direction at  
16 CenturyLink.

17 I do see, based on kind of the equivalency  
18 in the tech industry where FUD starts, I do see some  
19 equivalency in the way the headlines seem to have  
20 come out, the press releases, things like that, an  
21 attempt to really tie the allegations in CenturyLink  
22 regarding, you know, cramming as we've been  
23 describing it, to the Wells Fargo situation.

24 So it has analyses there of this might well  
25 be that, or here's a potential \$12 billion lawsuit.

1 So I do think that there's some real analogies  
2 there. But it's not something that one would  
3 necessarily expect to see. It's not specific to  
4 antitrust. It's not specific to securities class  
5 actions. It's more of a general phenomenon.

6 Q So -- and again, the Microsoft context is  
7 Microsoft was going around creating this  
8 environment, and that was an anticompetitive thing  
9 that they did wrong in that case?

10 A I don't remember how those specific  
11 allegations got resolved. I mean, there were lots  
12 of things in the Microsoft case, so it was part of  
13 the mix of what are the tactics that Microsoft is  
14 doing and what of those are legitimate.

15 But I would also say it wasn't only a  
16 Microsoft tactic. It's something that, with all due  
17 respect to my brother here in Silicon Valley, it's  
18 something that's been done a long, long time in  
19 tech. It's a very common situation.

20 And it's not just limited to tech, too, but  
21 if you can create some FUD out there -- and even if  
22 you didn't create it, if you can capitalize on it,  
23 so, you know, let's say some third law firm failed  
24 and it's like okay, well, that creates a whole worry  
25 environment, again, if you can kind of capitalize

1 that on by suggesting that somehow, you know, Cooley  
2 or whoever is more like that, that would be a way of  
3 you not creating the FUD environment, but perhaps  
4 trying to capitalize on it.

5 Again, this is all completely hypothetical  
6 to be clear on the record.

7 Q Yeah. I'm just trying to say, because this  
8 concept is kind of, you know, a key part of your  
9 report and I'm trying to understand it.

10 So you're not saying plaintiffs created  
11 this environment, right? That's not what you're  
12 trying to say?

13 A I agree with that. The environment was  
14 really created by Wells Fargo presumably, you know,  
15 whatever -- potentially their actions but certainly  
16 we observed with Wells Fargo in my limited  
17 experience and my reading of the press reports and  
18 things, and I cite a little bit in my report, I  
19 mean, they paid very large fines, for example.

20 And I understand that they reported, you  
21 know, large layoffs of people. And, I mean, I think  
22 it's fair to say it was a real thing at Wells Fargo  
23 there. So I don't have any reason to think that,  
24 you know, lawyers of any sort created that.

25 But it did create a different environment

1 before and after that suddenly the question of is  
2 this limited essentially to Wells Fargo or is this  
3 something that's much more widespread and we should  
4 have broader concerns.

5 Q So have you -- is there academic research  
6 quantifying this concept that you're taking from  
7 these other context?

8 A I'm not sure what even you mean,  
9 quantifying. You mean describing FUD as a concept  
10 and how it can be used in an anticompetitive way?

11 Q Yeah. Or measuring it.

12 A Certainly I -- again, I can't cite as I sit  
13 here right now, but I know that there -- well, to  
14 the best of my recollection there was and there is,  
15 therefore, existing research in -- as I recall in  
16 the context of Microsoft and some of these kind of  
17 antitrust issues that FUD is something that is  
18 explored in the research.

19 I can't cite specific papers and things  
20 right now but I have a recollection that it's a  
21 topic that's explored.

22 I'm not sure what exactly you mean by  
23 "quantified." I mean, I'm not sure how one would  
24 exactly quantify it as you're describing. I mean,  
25 it's a measure.

1           So -- but it certainly -- it is something  
2     that, again, to the best of my recollection the  
3     researchers and others have -- have analyzed in  
4     various contexts.

5           Q     So maybe this is a better question.  
6     Outside of the Microsoft experience that you  
7     described, have you studied FUD? Like is that  
8     something that you're holding yourself out as an  
9     expert on?

10          A     I'm not sure that one ever thinks of  
11     studying FUD specifically. I certainly have had  
12     that -- I certainly had the concept of FUD. I -- I  
13     definitely analyzed that in other cases. Again,  
14     it's a pretty common aspect in the technology  
15     environment. I can't necessarily think of the  
16     specific cases --

17          Q     Yeah.

18          A     -- where it's come up. But I'm  
19     underscoring the fact that it's not -- I mean, I  
20     appreciate the fact maybe it's a new concept in your  
21     experience there, but in terms of is this something  
22     that, you know, almost anybody in the technology  
23     industry, for instance, back in the '90s and since  
24     then, if you said oh, you know, look at that FUD,  
25     you know, that Cisco is spreading or whatever, I

1 mean, they would totally understand what that meant.

2 It's probably pretty hard to actually  
3 quantify it per se. It's a creation of -- by nature  
4 it's fear, uncertainty and doubt, kind of a  
5 heightened concern about things.

6 Q So one more thing. Again, you say the tech  
7 industry. What you're talking about there is,  
8 again, the competitive nature of the tech industry,  
9 and you're not talking about securities  
10 litigation -- it's not applied in a securities  
11 litigation against tech companies. What you were  
12 referring to earlier is about the competitive  
13 practices of technology companies.

14 Am I right about that?

15 MR. BLAIR: Objection. Misstates  
16 testimony, form.

17 You can answer.

18 THE WITNESS: Yeah. I mean, sort of is the  
19 answer to your question I think in the sense that  
20 it's true that Microsoft was an antitrust series of  
21 matters and it certainly was a specific thing in the  
22 Microsoft cases.

23 But to say that it somehow, you know, is  
24 limited to an antitrust or that I think would be  
25 absolutely wrong.

1           Because what it really is underneath it is  
2 underlying it is this idea that you're creating an  
3 environment of, you know, kind of heightened  
4 sensitivity to issues for whatever reason.

5           So that could be because you want your  
6 competitor to, you know, lose sales. It could be  
7 because you want your customers to go with you. It  
8 could be because you want -- you know, in this  
9 context, I think the analogy would be you're playing  
10 on the concerns of investors and the public that  
11 this could be another Wells Fargo. So hoping for a  
12 bigger settlement, if you can sort of tie it to this  
13 fear, uncertainty and doubt that's associated with  
14 Wells Fargo.

15           So it would be a mistake to think of it as  
16 a -- again, it's not an antitrust concept. It's  
17 not -- I mean, it could have applicability in  
18 antitrust but it's by no means limited to it. And  
19 it's not -- you know, it's not just a securities  
20 thing but it certainly has applicability in the  
21 securities world, so that's the best I can answer, I  
22 think.

23 BY MR. BLATCHLEY:

24           Q       So, you know, you said earlier that you  
25 hadn't really studied FUD in your experience. Have



1 you ever studied or taken any courses about, like,  
2 maybe reputational effects of disclosures in  
3 securities litigation?

4 A I haven't taken any courses in reputational  
5 effects in securities litigation. Certainly that's  
6 a concept -- it's not limited to securities  
7 litigation, but it's a concept that, I think, is  
8 inherent in lots of litigation out there, this one  
9 included where there's a concern about --

10 I mean, I'm in another case right now where  
11 literally that's exactly the core issue is is there  
12 some reputational effect that's going to cause  
13 lower, you know, customers in the future because of  
14 reputational issues or bad customer service and  
15 that's going to somehow, you know, get out there and  
16 cause us to lose customers.

17 So it's a very common element. And trying  
18 to quantify potential losses associated with that  
19 can happen in other kind of cases.

20 Q Okay. So you've studied what we're calling  
21 reputational effects in the securities context?

22 A I don't remember specifically in securities  
23 context, but, again, it's a much more general  
24 concept than that. I've certainly -- this idea of  
25 reputational harm, which is the underlying larger

1 concept under the FUD, it's like is my reputation,  
2 you know, rightly or wrongly tainted with these  
3 kinds of issues. That's certainly something that I  
4 have studied in cases.

5 Q Okay. And it's something that's, you know,  
6 the subject of academic studies, the reputational  
7 harm issue?

8 A Oh, yeah. For sure reputational harm is --  
9 you know, and broadly speaking reputation and those  
10 kinds of, you know, customer perception of  
11 companies. Those are for sure topics that are  
12 studied by academics.

13 Q Studied and, you know, quantifying models  
14 that will, you know, measure it?

15 A I mean, that's too broad a topic to answer  
16 simply but I think the answer is yes. I mean, as an  
17 example, there's, you know, analyses of brand value  
18 and if somehow -- well, I can give you -- actually,  
19 I can give you a specific example of years ago I was  
20 involved in a case where there were rumors about a  
21 company and, you know, the question was would  
22 consumers potentially believe these rumors and would  
23 that have potentially an effect on their sales, on  
24 their willingness to buy.

25 So, again, there's not an untruth to it but

1 it somehow paints a reputation of the company.

2 Q So, again, turning back to our disclosure,  
3 again, on June 16th, you're saying that the FUD is  
4 at some level responsible for the cause of the  
5 decline. Is that -- is that right?

6 A Close, I think. I'd say this post Wells  
7 Fargo -- and by "post Wells Fargo" I mean after some  
8 of at least the initial information about Wells  
9 Fargo was coming out, I think it's fair to say that  
10 that increased the concern or potential concern by,  
11 you know, customers, investors, others, about, you  
12 know, kind of issues associated with unauthorized  
13 charges or accounts or variations of that.

14 So the environment is -- has this situation  
15 in it, this FUD situation in it, and I think that  
16 when I view the stock price reaction and I  
17 understand the context and I look at the analysts'  
18 feedback, it does -- it is consistent to me with the  
19 market -- the heightened uncertainty because the  
20 market was aware before this of general allegations  
21 of cramming as we've talked about.

22 I think it does explain the environment in  
23 which we observe stock price decreases as the market  
24 would be concerned about that. Then when I look at  
25 the analysts' response to it, I see many of the

1 analysts themselves saying this seems like it's a  
2 reaction to, you know, concerns about Wells Fargo  
3 and uncertainty. We don't see it -- many of them  
4 saying we don't see it as being a big deal  
5 necessarily. I'm obviously paraphrasing. They  
6 don't use those exact terms. Or as significant, or  
7 what would be consistent with the type of decline in  
8 stock price.

9 So I view it as why do I see a pretty  
10 significant stock price decline, even setting aside  
11 other news. If one just accepts the simple premise  
12 that it was associated with that, why would that be.  
13 I see the FUD environment out there and to me that's  
14 consistent with it.

15 But, again, it's a broader -- it's a  
16 broader concern of just the fact that these are  
17 lawsuits anyways, so even if it didn't move as much  
18 as it did, it could still be a concern. But I think  
19 the FUD helps explain the environment in which one  
20 does observe an increase and some significant  
21 decreases.

22 Q Again, it's one of the contributing causes  
23 of the decline in the FUD environment?

24 A I think that's a fair statement, yeah, that  
25 I think that the FUD environment is -- it allows one

1 to understand what otherwise might not have caused  
2 as big a stock price decline, why do we observe as  
3 big a stock price decline as we do on those days, so  
4 I think that's fair.

5 Q And your opinion is, you know, the FUD kind  
6 of environment didn't cause the stock price decline  
7 prior to June 16th, right?

8 MR. BLAIR: Object to the form.

9 THE WITNESS: Well, I haven't studied that.  
10 I focused on the days that were in your Complaint.  
11 I'm not aware of other dates, put it this way,  
12 where -- where you could point to it and say, you  
13 know, that stock price decline seems to have a  
14 similar pattern. It plays into existing concerns  
15 about, you know, cramming and the Wells Fargo type  
16 allegations. I'm not aware of any but I haven't  
17 really studied it.

18 BY MR. BLATCHLEY:

19 Q Maybe I'll ask it differently. Other than  
20 FUD you haven't identified any other confounding  
21 information on any of the three disclosure dates  
22 that you believe caused the decline?

23 A If I understand your question, you're  
24 saying that the three disclosure dates that you're  
25 alleging that I've studied here, the question is

1 what other confounding information is there.

2 I haven't studied that question in detail.  
3 I'm not -- I don't -- they're not earning disclosure  
4 dates so they don't have the same kinds of issues  
5 as, you know, many of the dates on the inflationary  
6 side.

7 There may be other things on those days as  
8 well, but I haven't studied that in detail. I'm not  
9 aware of a significant number. I think -- I do  
10 see -- especially on the first and the third day,  
11 when I look at the intraday information, you know, I  
12 do see a connection -- let's take the first day  
13 between when this news comes out and the intraday,  
14 prices do seem to decline.

15 So I don't dispute that there's a likely  
16 connection between those two, and it's not that  
17 there was also, oh, our plant blew up that day. I'm  
18 not aware of any of that type of confounding  
19 information.

20 I think that was your question, Mike,  
21 wasn't it?

22 Q Yeah.

23 And just speaking of your intraday  
24 analyses, you even pulled news articles on those  
25 dates. And, I mean, you can let me know if I'm

1 wrong, but I didn't see anything else -- I assumed  
2 that the collection of articles included everything  
3 about CenturyLink on those dates. That's my  
4 understanding of what was in those exhibits.

5 Do you know what I'm talking about?

6 MR. BLAIR: Objection to form.

7 THE WITNESS: I do. I'm just -- I'm  
8 pausing a little bit.

9 I mean, for sure I was looking at -- so why  
10 don't you give me just a second. I can just -- I  
11 can just -- if it's worth it. I mean, tell me if  
12 you want me to.

13 What I'm just not remembering is whether or  
14 not there was some other information in there or  
15 whether I focused -- whether I was focusing on news  
16 about the lawsuit or whether I had news of the  
17 other. I just don't remember off the top of my head  
18 but I can look if you want me to.

19 MR. BLATCHLEY: Yeah. We'll come to that  
20 in just a second.

21 THE WITNESS: Okay.

22 MR. BLATCHLEY: Does anybody mind --  
23 And maybe if you want you can go back and  
24 look.

25 Can we take a quick break, like five, ten



1 minutes, Ryan?

2 THE WITNESS: Yeah. Sure. We've been  
3 going an hour.

4 MR. BLAIR: Fine.

5 THE WITNESS: That's fine with me.

6 MR. BLATCHLEY: Okay. Thank you.

7 THE VIDEOGRAPHER: Okay. So the time is  
8 1:55 p.m. and we are off the record.

9 (Off the record from 1:55 - 2:09 p.m.)

10 THE VIDEOGRAPHER: Okay. The time is  
11 2:09 p.m. and we are back on the record.

12 BY MR. BLATCHLEY:

13 Q Mr. Deal, I'm correct in stating that you  
14 don't criticize Dr. Hartzmark's opinions regarding  
15 the efficiency of the market for potential earned  
16 stock or the 7.6 percent bonds, right?

17 A I agree with that. I don't have any  
18 dispute with his conclusion that they both traded in  
19 efficient markets.

20 Q Okay. And then as part of that analysis,  
21 Dr. Hartzmark's analysis and your opinion in your  
22 report, you both developed similar event studies.  
23 Is that a fair statement?

24 A Similar in the broad sense, sure. I mean,  
25 there are some -- you know, some differences, but

1 broadly speaking I agree with that, yes.

2 Q And the difference is, as I understand  
3 them -- let me know where I'm wrong -- is the choice  
4 of index I think is the major one, the days  
5 excluded, and the method for calculating residuals;  
6 is that right?

7 A Yes. There is a very small -- I think it's  
8 fair to say super nerdy additional critique that I  
9 think is only interesting probably to Dr. Hartzmark  
10 and myself about what standard errors one should use  
11 in calculating fee statistics.

12 It really makes almost no difference. I  
13 think what I use is a little more theoretically  
14 correct, but I suggest we don't spend a ton of time  
15 on that. It's not materially important but I'm  
16 happy to talk about it if you want to.

17 Q No. I'm happy not to talk about it.

18 A But I think you've characterized the main  
19 ones, and certainly the industry index I think is  
20 the most important of those, but the other ones are  
21 there as well.

22 Q And then, again, other than the industry  
23 index, we can say you're on the same page with  
24 respect to Dr. Hartzmark's model?

25 MR. BLAIR: Object to the form.

1 BY MR. BLATCHLEY:

2 Q From our prior discussion, you don't have  
3 any problem with it besides the three issues we just  
4 discussed?

5 A I don't have any problem with it insofar as  
6 it goes in the sense of is it measuring  
7 statistically significant abnormal positive or  
8 negative returns. It is -- it is the right model to  
9 use with some of the choice differences we talked  
10 about, and the fact that he's done an event study.  
11 That part is all fine.

12 Q Okay. And I'm correct that we discussed  
13 this before, of the three alleged corrective  
14 disclosures, both you and Dr. Hartzmark, with your  
15 respective models, find June 16th and July 12th to  
16 be statistically significant; is that correct?

17 A For the equity, that's correct.

18 Mike, you're a little -- a little quiet  
19 again. I don't know if there's a way to get a  
20 little closer. I'm hearing you but it's just a tiny  
21 bit distant.

22 Q Is this better? Can you hear me?

23 A Yeah. It is a little bit better. Thank  
24 you.

25 Q Okay. Yeah. Of course.

1           So if it helps I can point you to the place  
2     in the report that I'm going to be talking about.

3     So I want to talk about June 19th and Paragraph 144  
4     I think is where you discuss it. I should probably  
5     go there, too.

6           A     144?

7           Q     Correct. Page 86.

8           A     Yes.

9           Q     So one of the issues that you have with the  
10    way Dr. Hartzmark did things and the way you did  
11    them, you state here that you do not believe it is  
12    appropriate to use a two-day window to assess the  
13    statistical significance; is that right? Am I  
14    understanding that correctly?

15          A     Yes. I think that -- that certainly is my  
16    general opinion. Essentially always and certainly  
17    in this case I don't think a two-day window makes  
18    sense when you've got an efficient market.

19          Q     So did you evaluate your model using a  
20    two-day window --

21          A     No.

22          Q     -- on the corrective -- you did not.

23                 Did anybody at Analysis Group do that  
24    before you submitted your report?

25          A     I'm not aware of any, no.

1           Q     And I think, again, this is Paragraph 144,  
2     you say it's inappropriate to use a two-day window  
3     because in an efficient market news responds to  
4     information very quickly.

5                     Is that -- is that right?

6           A     That is right, yes.

7           Q     And that's your belief here?

8           A     Yes. I do believe that. I think that's a  
9     very common understanding among economists and  
10    financial analysts that efficient markets implies  
11    very quick market response news. I think  
12    Dr. Hartzmark would believe that as well.

13          Q     Sorry. Just to quickly interrupt, I don't  
14    know if someone could mute -- could mute their phone  
15    who is not one of us three.

16                     Okay. Sorry. So, again, let me just go  
17    back. What's the basis for your belief beyond the  
18    fact that the market is efficient?

19          A     Well, I'm not sure if I understand your  
20    question. I mean, that is sort of gospel part of  
21    market efficiency is if you have an efficient  
22    market, it should respond very, very quickly. You  
23    know, sometimes seconds, sometimes minutes at the  
24    most is what the research would suggest to new news  
25    out there, so, I mean, there's tons and tons of

1 studies on that topic.

2 Q And are you aware of any literature or  
3 studies assessing multi-day windows?

4 A I'm -- not off the top of my head. I'm  
5 sure that's something that does get studied, but I  
6 think certainly the core premise of efficient  
7 markets is rapid price response to news.

8 So just conceptually thinking that -- I  
9 mean, to me, frankly, it's weird to hold these two  
10 things in the same hand of I've got efficient market  
11 and I think I should look at a two-day window.  
12 That's just inconsistent to me.

13 Q So the academic research that you're  
14 focused on or that -- you know, that you mentioned,  
15 a lot of that is just responses to information on  
16 earnings announcements, right?

17 A I mean, yes. I know that that's a topic  
18 that is studied. It's certainly not the only topic  
19 that's studied, but it's a very frequent one of oh,  
20 it turns out the market was expecting you to have  
21 \$100 million in profits and you had \$200 million in  
22 profits. Well, as soon as you announce it, what  
23 happens to the stock price. It isn't like oh, it  
24 lollygags around for a couple days and then --

25 Q Right.

1           A     -- it's like boom. It's up.

2           Q     And some of the reasons that's the case  
3     because -- well, what are some of the reasons why  
4     that's the case? Why earnings announcement dates  
5     are particularly studied in the efficient market  
6     context?

7           A     Why are they studied? Well, I think for  
8     one those are clearly days where information --  
9     important information about the future cash flows of  
10    the company is going to be revealed. They're  
11    revealing financial results, you know, other kinds  
12    of information, so it's an obvious date to choose.

13          Q     And analysts and investors and market  
14    participants are expecting that information will be  
15    disclosed on earnings announcement dates?

16          A     They're expecting information to be  
17    disclosed. Obviously they have their own  
18    expectations of what that information will be, but,  
19    yeah, they're -- they're certainly watching for it,  
20    if that's your question.

21          Q     Yeah. As opposed to every other, you know,  
22    trading day in a given time period, the earnings  
23    dates will certainly be dates in which there's going  
24    to be, for the reasons we just discussed, higher  
25    volatility and more likelihood of, you know,



1 abnormal return. Is that fair to say?

2 A I suspect that is right. I don't off the  
3 top of my head know the exact literature and  
4 citations about --

5 I think we just lost it again here. I  
6 think we're coming back up. I see you guys again.

7 -- about exactly how much more volatility  
8 there is on earnings day than other days, but  
9 certainly I don't disagree that they're important  
10 days where a lot of information is released and  
11 they're oftentimes studied by academics.

12 Q And typically, again, the higher  
13 volatility, more information, you know, they're  
14 different than like other days where there's not a  
15 similar higher disclosure?

16 A I mean, they're different in the sense that  
17 they -- we're freezing again -- by definition that  
18 is when financial information is being disclosed and  
19 the market is expecting information.

20 But it is certainly not my opinion that  
21 efficient markets mean it responds quickly on  
22 earnings days and otherwise, you know, it can take  
23 days to respond. That's not my view. And I don't  
24 think that's the mainstream view of economists  
25 either.

1 Q That's helpful.

2 Do you know or are you aware of any  
3 academic research showing that the length of time  
4 for information to be reflected in a stock price  
5 might differ based on the nature of the disclosure?

6 A Not off the top of my head. It wouldn't  
7 surprise me. I mean, that seems like exactly the  
8 kind of topic that finance guys might study.

9 I'm certainly not aware of any literature  
10 that says on nonearning days, it takes two days for  
11 information to get incorporated into the price.  
12 That could create a huge arbitrage opportunity for  
13 hedge funds if that were true.

14 Q Sorry. I missed -- hold on.

15 So maybe I'll ask it this way: So would  
16 you agree that -- let me ask it this way: Are you  
17 aware of any literature that says the nature of the  
18 dissemination -- and what I mean by that is a  
19 company versus a third party -- disclosing the  
20 information as having an impact on the amount of  
21 time it takes for information to be reflected in the  
22 stock price in an efficient market?

23 A Again, I can't cite specific papers off the  
24 top of my head from memory. I mean, again, that's  
25 exactly the kind of thing that finance academic

1 loves to study. I'm sure there is research out  
2 there on it. I just don't have it memorized off the  
3 top of my head.

4 Q And the same goes, you know, for example,  
5 the complexity of the information that's disclosed  
6 and, you know, how long it takes to process that?

7 A Same answer, I think. I don't have -- I  
8 don't have papers memorized off the top of my head,  
9 but that's the kind of information that -- or the  
10 kind of things that academics love to study.

11 Q Would you agree that those factors could  
12 influence the rate of stock price reaction?

13 A Super modestly, in my experience.

14 Q But you're not aware of like academic  
15 literature saying those factors do not have an  
16 impact on the time for response?

17 A Again, I don't have the papers memorized,  
18 but I'm very confident that there's not good  
19 financial literature that says it takes two days on  
20 nonearnings days for the market to figure out  
21 relatively straightforward information, and process  
22 it into the stock price.

23 And that's not even what we observe on  
24 these days, so I think it's frankly sort of a silly  
25 proposition.

1 Q Okay. So, again, you're not aware of like  
2 a legal precedence saying economists are prohibited  
3 from considering two-day or multiple-day windows as  
4 somehow being, you know, not appropriate?

5 A I'm not a lawyer so I don't know about the  
6 legal precedent. I can tell you in my experience  
7 having done this for a long time, I mean, with all  
8 candor we sort of roll our eyes when we see two-day  
9 windows typically because it's just not -- it's  
10 something that's very, very hard to reconcile with  
11 the facts with efficient market claims.

12 Q Are you aware of the Analysis Group ever  
13 using a two-day window in any context -- I mean,  
14 again, securities class action context?

15 A I -- I don't know. I don't have a  
16 comprehensive knowledge of it.

17 Q Have you ever examined securities prices  
18 using a two-day window in any of the consulting work  
19 or testifying work you've done?

20 A I mean, yes, in the sense that I know that  
21 we sometimes see these windows from plaintiffs'  
22 counsel and we sometimes analyze those. I will say  
23 I haven't seen it for a while in my experience,  
24 so -- but it's certainly something that comes up and  
25 we look at various windows sometimes in terms of

1 understanding reaction and things like that.

2 So I'm not saying it's never done. But my  
3 own, you know, view, and certainly in this case I  
4 think it's pretty easy to see it in the underlying  
5 data, is that a two-day window is not appropriate.

6 Q So let me ask this question. We're talking  
7 about the length of time to respond to information.  
8 What if there's like some uncertainty about the  
9 information, could that impact the length of time?

10 A Well --

11 MR. BLAIR: Object to form.

12 THE WITNESS: -- I think if -- I'm not sure  
13 if I quite understand your question. It sort of  
14 has -- I think it's related to the complexity of it.

15 So, you know, I'm making a simple example  
16 here or kind of an extreme example, but, you know,  
17 if a giant 400-page report gets dropped on the  
18 press -- press release one day and buried in  
19 Page 380 of it is sort of, by the way, our plant  
20 blew up, you know, that could take a bit for them to  
21 process through that and understand it.

22 Or if the news is some form of we're not  
23 sure but we may have a problem with a plant, I mean,  
24 the market may react initially and it may -- as more  
25 information is revealed, it could certainly

1 change -- you know, the stock price could change. I  
2 believe markets are evolving in terms of their  
3 collective expectation of what the effect will be of  
4 something, so that can certainly happen.

5 But I would not expect, just because it's  
6 complex information, that there's no reaction to it.  
7 It could be some initial reaction and then as  
8 more -- you know, if it's information that requires  
9 someone to go and check something or whatever, I  
10 mean, obviously that can affect the specifics of it  
11 as well.

12 But, again, I don't -- I don't see that  
13 fact pattern here. I should say, I see the fact  
14 pattern here in the sense that I do think these  
15 lawsuits themselves are simply -- there's  
16 uncertainty about is there some legitimacy to it so  
17 in that sense I do.

18 In terms of the market response to that, I  
19 mean, I think you can pretty clearly look at, say,  
20 June 16th and see it's not an earnings day but the  
21 market reacted quickly to this news.

22 BY MR. BLATCHLEY:

23 Q Great.

24 Okay. And the news on the 16th, it comes  
25 out at 1:50 in the afternoon, right?

1           A       Yeah. I think that's right. I know that  
2       as I was reviewing the data -- and I'm looking at  
3       Exhibit 30A, I think what's interesting to me --  
4       it's got an interesting phenomena here which is, you  
5       know, you do see a fairly significant reaction.

6                   I'm not using "significant" in the  
7       statistical sense here, although overall it does  
8       move in a statistically significant way from -- from  
9       over the course of the day, but it sort of looks  
10      like it kind of pauses a little and then falls off  
11      the cliff, the mini cliff here.

12                  It's my understanding that it first -- it  
13      took a little while to hit the Bloomberg press feed,  
14      but I think that is all part of the same -- the same  
15      point, that Bloomberg, in addition to obviously  
16      being the revenue source for the former presidential  
17      candidate, is a very widely used financial service.

18                  And I'd say in my experience it's the one  
19      that most finance guys -- and I'm using "guys"  
20      generically there, not in any gender way, that  
21      they -- that they follow, so if something hits some  
22      other form of a press release, and then, say, half  
23      an hour later hits Bloomberg, it may well be that  
24      you'd see the most significant movement once it hits  
25      Bloomberg. That's kind of an interesting just sort



1 of operational aspect of this. And I think that's  
2 kind of what we observed in this situation.

3 But, again, we're talking about relatively  
4 minor differences, short amounts of time. These are  
5 not multi day kind of situations.

6 Q Got it.

7 And, again, this article did get  
8 published or at least, again, roughly speaking,  
9 about two hours before the close of market trading  
10 on Friday?

11 A Yeah. I think that's correct.

12 Q And so you say also in your report that  
13 when an announcement is published after trading  
14 hours, you're expecting the impact to be seen the  
15 following day; is that right? That's kind of what  
16 is laid out in -- I think we spoke about it earlier  
17 today -- Figure 5.

18 A I agree with that as a concept. So if the  
19 news were to come out at 6:00 p.m. it definitionally  
20 can't affect cash prices assuming it's new news. So  
21 one would expect to see that reflected in the  
22 opening price effectively of the following day. I  
23 mean, I'm setting aside after-hours trading here.

24 Q Right.

25 And, again, it would -- the impact that --

1 you measure the return on the following day, right,  
2 for a post -- again, talking about the trading day  
3 for a post market closed disclosure?

4 A I think I'm following what you're saying.  
5 Yes. So just to play this so I make sure I got the  
6 hypothetical right, so first setting aside the  
7 weekend for a minute. If it's a Monday it closes at  
8 \$10, at 6:00 p.m., you know, bad news comes out and  
9 it opens at -- what did I say \$10? -- it opens at \$8  
10 and then no other news comes out during that day so  
11 it closes at \$8, you're typically measuring the  
12 close of the trading day after the news comes out  
13 compared to the untainted close prior.

14 Q And so, for example, the full impact would  
15 say is within the two hours that we have left on  
16 that Friday the 16th?

17 A Yes. That's -- I think the answer is yes  
18 to your question, that that's what I'm measuring as  
19 the change on the 16th, is the change from the close  
20 on the 16th.

21 Q So you said the information was  
22 straightforward, you know, that was, you know,  
23 released on the 16th.

24 Why do you say that? Why do you believe  
25 it's straightforward?

1           A       I mean straightforward in the sense that,  
2       you know, it's the news of a lawsuit being filed. I  
3       don't think that's a hard concept to understand.

4                   And obviously there's some details and  
5       specifics of the allegations from a former employee  
6       and so forth, but you can read the press releases  
7       and see what -- how they're characterizing it.

8                   Again, as I said, there is uncertainty for  
9       sure around the broader questions that we talked  
10      about all day about whether this represents truth or  
11      fact or allegations. But the idea that there was a  
12      lawsuit filed that had Wells-Fargo-like allegations  
13      in it, I don't -- I don't think that is particularly  
14      complex information.

15           Q       Right.

16                   But like here's an easy one. Again, there  
17      wasn't in that disclosure here's going to be the  
18      cash flow impact on the company, right? That wasn't  
19      part of the disclosure?

20           A       I agree with that, yeah. Certainly.

21           Q       Yeah. The other company didn't provide  
22      guidance, for example, in response to the  
23      disclosure?

24           A       That would be a whole new industry, I  
25      guess, for people to do if sort of every time a

1 lawsuit was filed the company would provide, oh, we  
2 expect this to, you know, cost us a million bucks or  
3 zero or whatever, no, they didn't do that. Not that  
4 I'm aware of, I should say.

5 Q So I want to -- you mentioned your intraday  
6 analyses just a minute ago. And I think I want to  
7 take a look at those.

8 I think -- just for a minute. Hold on. I  
9 think those begin Exhibit 30A.

10 A Yes. That's correct.

11 Q Just so we're on the same page, I want to  
12 get to the right paragraph of your report. It's  
13 162, I want to say.

14 A 162 I think is talking about the two-day  
15 thing.

16 Q Yeah.

17 A Do you want to talk more on that or...?

18 Q Yeah. 162, 163, you're saying you can't --  
19 June 19th cannot plausibly be tied to alleged  
20 curative disclosures and we shouldn't use a two-day  
21 window, right? Isn't that what that conclusion is?

22 A I certainly agree we shouldn't use a  
23 two-day window. I don't find June 19th to be a  
24 statistically significant movement day.

25 Q Right.

1           And you didn't analyze whether June 16th  
2           and 19th would be significant, right?

3           A     I didn't look at a two-day window. I don't  
4           think it's the right thing to do.

5           Q     So one of the things that you say here is  
6           that, you know, "There is no reason to believe the  
7           market needed additional time to process the  
8           information."

9           Am I reading that right?

10          A     Yes.

11          Q     And, again, you're saying although there's  
12          uncertainty, this was again -- it wasn't -- what was  
13          the example you gave? Like a 200-page document that  
14          people needed to read and translate?

15          A     Yeah. I agree with that. It's not -- it's  
16          not that kind of information.

17          Q     So and then in Exhibit -- let's just look  
18          at 30B. You've compiled here -- I think it's kind  
19          of a poll of the news on that day.

20                 Can you just walk me through what this  
21          shows?

22          A     Well, I think to be clear on the Page 184  
23          of 253 under the Notes and Sources, I describe what  
24          it is, which is these are all stories that are  
25          relevant to cramming that were identified from, in

1 fact, even Bloomberg when I searched for  
2 CenturyLink, so it's a subset of stories from that  
3 day all of which had CenturyLink in their name.

4 In addition to that, I think there's some  
5 analyst reports in there as well. But specifically  
6 as you can see it's focused on stories relevant to  
7 cramming.

8 Q So how did -- yeah. How did you make that  
9 determination that it was relevant to cramming or  
10 not? And maybe you're just saying this is our way  
11 of excluding junk, like stuff that's not -- just  
12 walk me through what was done in that Footnote 2.

13 A Sure. I mean, so first step is obviously  
14 the search. Okay. Let's look for CenturyLink,  
15 let's look for all stories on that day from these  
16 sources. Let's look at the analyst reports as well.

17 Then it's literally a review, so that's  
18 part of what the staff under my direction was  
19 reviewing each of those to -- obviously there's some  
20 professional judgment under my direction as to is  
21 this related to cramming or not.

22 But the attempt was -- I wouldn't  
23 necessarily call it junk as you characterized it,  
24 but, you know, kind of we've been talking all day  
25 about confounding information and that, so that's

1 why I was saying there may well be other information  
2 coming out on those days. This isn't intended to be  
3 a list of everything that came out. This is  
4 intended to be focused on things related to  
5 cramming. Most of which appear to be related to the  
6 lawsuit, if not all of them.

7 So that's essentially the process, is  
8 identify the superset, you review them, tag the time  
9 on those, the ones that are related to cramming,  
10 plot them as red dots on Exhibit 38.

11 Q So can I ask you a question, is the one  
12 that you rejected, are those in your Appendix B, I  
13 believe it is, or did they not make it into the  
14 appendix because -- for whatever reason, because  
15 that's the process you went through?

16 A Yeah. I certainly described the process.  
17 I'd have to look back at the backups to see if all  
18 of the news reports were initially input. I  
19 certainly don't remember off the top of my head.

20 But one could certainly replicate it by  
21 doing the same searches and just doing the reverse.  
22 Just saying whatever I don't list by definition are  
23 the things that were not included. But I just don't  
24 recall exactly which is backup.

25 Q Now, with the caveat that there's some sort



1 of relevance determination here that it's not -- I  
2 mean, can you give me a little bit more clarity on  
3 what that was? Did it actually include the word  
4 "cramming" or was it broader than that? Because  
5 it's --

6 A It was broader than that. I mean --

7 Q Okay.

8 A I'm sorry. I didn't mean to -- I think I  
9 talked over the top of you. My apologies for that.  
10 Were you done with the question, Mike?

11 Q I was.

12 A Yeah. Yeah. I think "broader than that"  
13 is a fair statement. I mean, many of them did have,  
14 you know, literally those words in there but it  
15 wasn't just a mechanical exercise, if that's your  
16 question. It was in my experience mechanical  
17 exercises can help, but they're not -- well, rarely  
18 sufficient on these things.

19 You can imagine a whole article that would  
20 describe the lawsuit that literally never used the  
21 word "cramming," but it's pretty clearly related to  
22 the lawsuit and the related allegations. So that's  
23 where -- you know, we haven't been told they're  
24 replaced by AI yet.

25 Q So just getting back to -- I mean, this

1 exercise, right, is it part of the support that  
2 you've included as why a two-day window is not  
3 appropriate, and you use it to support your opinion  
4 concerning Dr. Hartzmark's damages methodology?  
5 That's fair to say, right?

6 A I think it's -- yes. I think that's fair  
7 to say. I mean, he doesn't find the 19th to be  
8 statistically significant. I don't find it either.  
9 I find it by even less than he does. I mean, he  
10 only even ties the 19th there by saying it's a  
11 two-day window, and I just don't think that's  
12 appropriate.

13 Q So undertaking the analysis and looking  
14 at -- I mean, the reason you're doing this is --  
15 those two reasons we just described, and you're  
16 looking at the stock price reaction in response to  
17 new information. Is that -- that's fair, right?  
18 I'm describing that correctly?

19 MR. BLAIR: Objection to form.

20 THE WITNESS: Sorry. Did I interrupt you,  
21 Ryan?

22 MR. BLAIR: Go ahead. It's on the record.

23 THE WITNESS: In broad strokes, yes, but  
24 I'm not doing kind of a mini event study on each day  
25 here but I'm looking at -- I mean, this is very

1 common in securities cases. As you're saying,  
2 well -- I mean, you know, you could imagine a  
3 pattern that would say the stock dropped in the  
4 morning because they said my plant blew up, and then  
5 when this news came out, nothing changed.

6 So you typically want to look at the  
7 intraday saying -- as I recall, Dr. Hartzmark  
8 himself looked at intraday things as well just to  
9 say we expect the information to be confounded in  
10 the stock price quickly and, A, is it, and B, is  
11 there at least -- you know, can one not dismiss out  
12 of hand to put it in a negative that this is the --  
13 this is related to it.

14 And I agree, I certainly can't dismiss out  
15 of hand that these -- the press releases about the  
16 lawsuits do seem to have directionally had some  
17 impact on the stock price. Again, there could be  
18 some other confounding things in there but this  
19 pattern to me is suggestive that, you know, we can't  
20 just -- we can't rule out these. And it's --  
21 anyway...

22 BY MR. BLATCHLEY:

23 Q So thank you for that.

24 So one of the things I think you already  
25 mentioned is that you look at analyst reports, and

1 in, you know, assessing whether an analyst report  
2 would be helpful to your analysis of the stock price  
3 reaction, I assume you'd want to understand the  
4 content of those reports; is that right?

5 A Sure. I mean, I think that's a very  
6 general statement, if I understand it.

7 Q Right. It's not just the fact that there's  
8 an analyst report, but it's what the analyst report  
9 actually says that matters, right?

10 A Yeah. I certainly -- I mean, I think -- I  
11 agree with that. It sounds right to me. I mean,  
12 just the fact of an analyst report isn't  
13 particularly informative in and of itself.

14 Q Right. And so I think we're on the same  
15 page.

16 So it's also -- like you do analysis  
17 elsewhere about price targets, and you would agree  
18 with me that it's appropriate -- again, I'm talking  
19 about the content of the analyst's report -- the  
20 reasons why an analyst changes their price target is  
21 important.

22 Would you agree with that?

23 A Sure. And, I mean, I have that discussion  
24 in my report itself. I've analyzed those questions  
25 saying well, A, I don't see very many price changes,

1 which itself is informative, but where I do see  
2 price changes I dig a little deeper to say okay,  
3 well, what are they saying.

4 Is it because they say I see a lawsuit is  
5 filed the stock price dropped, I got to believe that  
6 lawsuit is almost certainly true, and therefore it's  
7 going to affect future cash flows, or what are they  
8 saying around that.

9 Are there other things that have caused  
10 them to change their price target. Are they noting  
11 a lawsuit, but what are they crediting in terms of  
12 the likely underlying substance to it or what's the  
13 effect of it. So absolutely I agree with that and  
14 that's what I've done.

15 Q So -- okay. And you would also agree, I  
16 think, then when you're looking at this kind of --  
17 this two-day window context that we're talking  
18 about, any statements by the company itself; is that  
19 right?

20 A I'm not entirely sure what you mean, but  
21 you confused me with the two-day window thing in  
22 there. You're -- I mean --

23 Q Yeah.

24 A -- I agree the company statement could be  
25 relevant but I'm not sure what it means by the two

1 day.

2 Q It means when you're assessing what caused  
3 the, you know, stock to react on these two days, the  
4 16th and the 19th, statements by the company would  
5 be something you'd want to consider?

6 A Sure.

7 Q Okay. And so --

8 A I certainly agree that statements by the  
9 company could be relevant, if it's a general  
10 question like that.

11 Q Yeah. I think it's even a specific one. I  
12 mean, you said analysts and what they said would be  
13 important. I understand that analysts mostly get  
14 their information from a company.

15 Would you agree with that?

16 A No. I don't think that's true. I agree  
17 analysts often get a lot of information from  
18 companies, but at most -- I guess it depends on how  
19 you consider -- what you define as "most."

20 Certainly they would get information about  
21 financial data that's typically coming from the  
22 company, so in that sense it's most. But it's also  
23 very true that analysts -- one of their big claims  
24 to adding value is that they're not just parrots  
25 receiving what the company told them; otherwise,

1 they would presumably not add any value.

2 So they're talking to customers, they're  
3 doing other kinds of things frequently, so they get  
4 lots of information from the company but it's  
5 hopefully in some sense not just the company.

6 Q And it's hopefully -- I mean, you would  
7 agree they're not going to ignore what the company  
8 would say, right?

9 A Not going to what?

10 Q Ignore what the company might say.

11 A Well, that's a little harder question to  
12 answer because I've certainly seen situations where  
13 analysts were quite clear they didn't think that  
14 management had any credibility and they were  
15 ignoring what management was saying. I suspect  
16 you've been involved in some of those cases as well.

17 But as a general matter, I agree with that.  
18 That they -- unless there's sort of some unique  
19 circumstance, they typically would, you know, at  
20 least see what management is saying.

21 Q And certainly, again, the company's  
22 statement is not irrelevant to assessing a stock  
23 price decline in response to the corrective  
24 disclosures?

25 A I certainly don't think it's irrelevant as



1 a concept. Whether or not it -- you know, if it's a  
2 specific matter and a detailed matter, you know, the  
3 mix of information all those kind of things, but as  
4 a general concept you can't dismiss it out of hand.  
5 I agree with that.

6 Q Do you -- do you believe it's irrelevant  
7 here?

8 A You mean company statement?

9 Q Yes.

10 A Again, not -- not out of hand. Are you --  
11 if there's something else specific you're thinking  
12 about, I'm happy to look at it or something, but...

13 Q Okay. What about in assessing, you know,  
14 again, we're talking about this two-day window issue  
15 and what's, you know, causing the stock price to  
16 decline and, you know, what's appropriate to look  
17 at.

18 Would it be relevant to you to consider  
19 anything that, say, the investor relations personnel  
20 at the company itself were saying about the reasons  
21 behind the stock price decline?

22 MR. BLAIR: Objection to form.

23 THE WITNESS: I -- I feel like you're  
24 dancing around something that you just want to show  
25 me. If you want to just show it to me, I'm happy to

1 look at it. But I'm not -- out of hand you  
2 obviously can't dismiss that. That it's always  
3 irrelevant, no, it's not always irrelevant.

4 BY MR. BLATCHLEY:

5 Q Would it be important to you?

6 MR. BLAIR: Same objections.

7 THE WITNESS: Again, it really depends on  
8 what's -- what's in it and other things. It's hard  
9 to make such a blanket statement. It's not  
10 irrelevant.

11 BY MR. BLATCHLEY:

12 Q What about let's say a major investor, like  
13 one of the top, you know, investors in the company,  
14 let's say they make a statement or, you know,  
15 disclose a position of that, would that be something  
16 that's important for you to consider?

17 A Again, you're asking such general  
18 questions, I'm not sure, Mike, if one could answer  
19 them. They're not -- I mean, one never sort of just  
20 dismisses out of hand that, but, you know, it really  
21 depends on what it is. I mean, just the fact that  
22 someone took a big position in a company, I mean,  
23 that may or may not be interesting or important.

24 Q Again, I think what we're talking about is  
25 when we're doing this analysis of what's causing the

1 stock price to decline, you've been saying that  
2 there are some things that you'd want to look at  
3 which are the analyst reports, we've agreed on that.  
4 You said it's potentially relevant what the company  
5 says.

6 Would you want to consider, you know, like  
7 a five percent holder makes a statement or discloses  
8 a position, would that be something you'd want to --  
9 if that happens during the time period we're talking  
10 about?

11 MR. BLAIR: Objection to form.

12 THE WITNESS: I'm not trying to be evasive  
13 or dismissive. I just -- you can't make sort of  
14 just some blanket statement. And I'm not trying --  
15 I'm certainly not doing any kind of a microanalysis  
16 of oh, this news story moved it this much, that  
17 moved it that much, all of that. But the broad  
18 facts I think are not in dispute here.

19 There were lawsuits filed. The stock price  
20 moved. It moved quite quickly initially. It didn't  
21 move statistically significantly on the 19th, so I'm  
22 not sure -- it's like you're -- anyway, I'm not  
23 quite sure where you're going with this and I'm a  
24 little confused honestly.

25 \\\

1 BY MR. BLATCHLEY:

2 Q You know what a 13D filing is, right?

3 A Yes.

4 Q And it's for, you know, you get  
5 five percent of the company, you have to disclose  
6 your position and a couple other things. Is that  
7 fair?

8 A That's -- yes. That's my understanding.

9 Q And are you aware of academic literature  
10 addressing stock price reactions in connection with  
11 13D filings?

12 A Again, same answer as before, that I'm not  
13 going to be able to quote you specific papers, but  
14 that's absolutely the kind of things finance guys  
15 love to study.

16 Q And generally there would be a positive  
17 impact upon the filing of a 13D according to those  
18 studies?

19 A I'd have to look at the -- I'd have to look  
20 at the literature and see. I mean, I'm not -- I  
21 think it kind of depends on who's taking the  
22 position and why and those sorts of things, so I'm  
23 not sure you can make it a simple statement.

24 Q That's fair, but it could have an impact on  
25 price reaction?

1           A       When you say "have an impact on price  
2       reaction," I think what you're asking is could the  
3       fact that they disclosed hey, you know, Carl Icahn  
4       is taking a five percent position in the company, is  
5       that the sort of thing that might move the stock  
6       price, yeah, I think it could, if that's your  
7       question.

8           Q       So let me just turn to, I guess I want to  
9       look at 30 -- 31B. I think it's probably easier  
10      this way.

11          A       I'm there.

12          Q       I'm sorry, guys. I just need a minute.

13          A       I do have the paper copy if you want to  
14      just refer to that.

15          Q       So I'm looking at your -- you've got one,  
16      two, three, four -- you've got 6/19 Insurance  
17      Information Institute Database. Do you see where I  
18      am?

19          A       When you say -- do you want me to be  
20      looking at --

21          Q       I'm sorry. Yeah. Hopefully I'm on the  
22      right thing. I'm on Exhibit 31B. Are you with me?  
23      I'm sorry.

24          A       Almost. I'm just getting my -- okay. All  
25      right. I'm on 31B, yeah.

1 Q And just looking down -- again, let me just  
2 back up one second, did you read all these articles  
3 before they went into the report or was this  
4 something handled by the staff?

5 A Primarily the staff, under my direction.

6 Q Okay. So you've got -- you've got these  
7 disclosures June 19th, 2017 at 9:02, the Morgan  
8 Stanley analyst report?

9 A Yes.

10 Q And then after that you've got the  
11 June 19th, 2017, 9:40 Denver Business Journal Online  
12 news article?

13 A Yes.

14 Q So I don't know if I've done this correctly  
15 but I just introduced -- or I tried to introduce.  
16 Let me know if you get it -- Exhibit 31 which has  
17 been marked for the record.

18 A I do see it. Congratulations on that.

19 Q So just looking at that -- yeah. Sorry.

20 A Hang on a second. It's just spinning here.  
21 Wait. There, it's coming up. Okay.

22 (Deposition Exhibit 31  
23 was marked for identification.)

24 BY MR. BLATCHLEY:

25 Q So I just want to direct you, the time

1 stamp or at least the one that we've -- this is the  
2 document that you've produced, this is at 9:30 in  
3 the morning Eastern time on the 19th.

4 A Okay.

5 Q I just didn't -- I didn't see it in your  
6 31B or your exhibit on the 19th of 31A. And let me  
7 know if I just missed it, but then I just want to  
8 ask you a couple questions about it.

9 A As I sit here right now I don't see it on  
10 the list.

11 Q So it's fair to say that that article is  
12 not in this exhibit either, you know, referenced as  
13 part of the -- you know, one, two, three, four,  
14 five -- I mean, I assume, and let me know if I'm  
15 wrong, the articles listed in 31B, are those  
16 referenced in 31A on the chart?

17 A Yes. I think that's accurate.

18 Q Okay. So this Bloomberg article --

19 A Sorry. Just to be clear --

20 Q Yeah.

21 A -- there are -- oh, 31A is just the  
22 intraday trading on the 19th. 31B includes articles  
23 from the 17th and the 18th as well, as well as like  
24 before trading opens on the 19th, so there's more  
25 listed on 31B than there are red dots on 31A.



1 Q Yeah. Yeah. And so I guess on 31A I just  
2 looked at No. 4 on the notes and sources, which I  
3 think explains what you're describing, which is one,  
4 two, three, four, five are stories or reports  
5 released the prior weekend or before market.

6 Is that -- are we on the same page?

7 A Yes. I think that's right.

8 Q Okay. So, again, going back to the  
9 Exhibit -- what did we call it? -- 31, I guess. So  
10 this is an article that -- do you understand that  
11 this article is referenced in plaintiffs' Complaint?

12 A I'd have to double-check but it wouldn't  
13 surprise me.

14 Q You understand that you've referenced this  
15 article in your report, in other sections of your  
16 report?

17 A I certainly recognize the 12 billion number  
18 in it, so I'm happy to double-check but I'll take  
19 your word for it.

20 Q And this, again, was referenced in the  
21 Complaint -- plaintiffs' Complaint as one of the  
22 articles in causing -- sorry, in the loss causation  
23 truth emerges section?

24 A Again, I'll take your word for it.

25 Q Again, I just want to make sure. You agree

1 with me it's important to include when assessing --  
2 again, I think you make a statement in your analysis  
3 using this intraday price chart about the  
4 reasonableness of the Complaint's allegations.

5 You agree with me that in doing that it  
6 would be appropriate to consider what is alleged in  
7 the Complaint?

8 A I'm not quite sure of your question.  
9 Sorry. Maybe you could rephrase it.

10 Q Yeah.

11 This is alleged as, you know, a  
12 corrective -- or review of corrective information.  
13 Your analysis on the intraday price decline does not  
14 appear to include it. And I'm just asking the  
15 question why did you think it was appropriate not to  
16 consider this article?

17 A Well, I mean, you just said that I cited it  
18 at a place so obviously I have considered it. Your  
19 specific question is why is it not listed on 31B? I  
20 don't know. I'd have to go back and check on that.  
21 But it certainly isn't changing any opinion.

22 Q Yeah. No. I'm just concerned because, you  
23 know, you spend a couple paragraphs, 144 you're  
24 saying a two-day window is inappropriate, you got  
25 147 where you are talking about the model and the

1 decline on the 19th and why it's not appropriate to  
2 consider a two-day window, and your support for that  
3 is this exhibit about the intraday trading.

4 And I'm just wondering why we're not  
5 talking about the article in the Complaint.

6 A Well, I think maybe you're misunderstanding  
7 what we've been talking about for the last bit. The  
8 support for a two-day window isn't based on how many  
9 dots are on these charts or the specific price  
10 movement of those.

11 It's based on a much more general  
12 proposition that's reinforced by the intraday  
13 analysis here, but it's not -- I mean, the  
14 fundamental point is Dr. Hartzmark and I agree this  
15 is an efficient market for the equity for  
16 CenturyLink.

17 There is a statistically significant drop  
18 on the 16th. There is not a statistically  
19 significant drop on the 19th. I look at the  
20 intraday news on the 16th and it does seem to be  
21 moving in a consistent way with the framing, so I --  
22 those all seem fine to me as far as they go to  
23 suggest that the 16th one can't rule it out, but the  
24 19th -- the idea that the two-day window is  
25 somehow -- one would reach a different conclusion if

1 one had more dots or fewer dots or something like  
2 that, that's not the point.

3 Q So -- and again, I'm sorry. I might have  
4 given you the wrong paragraph. 164 is I think where  
5 I was focused.

6 And, again, you said in these paragraphs  
7 preceding 164 talking about the intraday price  
8 analysis and how it supports your conclusion that  
9 Dr. Hartzmark's blanket assumption that plaintiffs'  
10 allegations will be shown to be true is not  
11 supported. And I'm wondering why when we're talking  
12 about plaintiffs' allegations you're not including  
13 the articles that are clearly alleged in the  
14 Complaint.

15 MR. BLAIR: Object to the form, asked and  
16 answered.

17 THE WITNESS: I think I've answered this as  
18 much as I can. You yourself have noted that I cite  
19 this in my report. I don't dispute that it's in the  
20 Complaint. It seems exactly consistent with, you  
21 know, the general thrust of all of these corrective  
22 disclosures that have been identified. It doesn't  
23 change anything there.

24 So as to why it's not specifically listed  
25 on that chart, I don't know, I'd have to go back and

1 look but it doesn't change anything. The chart is  
2 intended to be illustrative of whether there's  
3 anything in the intraday that would be inconsistent  
4 with, you know, kind of the efficiency of the market  
5 and therefore why one needs to think about two-day  
6 windows, and I just don't see it.

7 BY MR. BLATCHLEY:

8 Q Okay. So in addition to the two-day window  
9 you've also assessed -- you have some comments in  
10 your analysis of the 7.6 percent bonds, right?

11 A You're now switching topics, is that right,  
12 to the bonds?

13 Q I just want -- again, would it be  
14 appropriate to not include this from your  
15 consideration?

16 MR. BLAIR: Object to form.

17 THE WITNESS: Yeah. I mean, we clearly  
18 have talked about the fact that I considered it.  
19 You've noted that I don't see it on my 31B and I can  
20 go back and look and see, but that certainly doesn't  
21 mean it hasn't been considered.

22 And as I review it on the screen --  
23 although the version I see on the screen seems to be  
24 missing a bunch of letters, so it's kind of hard to  
25 read a little bit, at least on my screen. But it

1 seems to be just a recitation of the same things. I  
2 don't know if your version seems to be missing a  
3 bunch of letters, too.

4 BY MR. BLATCHLEY:

5 Q Yeah. And I apologize for that. That's  
6 the way it was produced to us. And I wish it was  
7 better quality but that's what we have.

8 But, you know, there is here a statement  
9 from the company. You know, it's -- again, it's  
10 the -- the article that's, you know, discussed  
11 extensively in the Complaint and the party's  
12 submissions.

13 A I mean, that doesn't seem wrong to me, but  
14 one only has to glance at 31B to see 12 billion, you  
15 know, show up in many, many headlines. For  
16 instance, the fact of the lawsuit was -- if you want  
17 to point me to something that you think is unique  
18 and new information in here, I'm happy to think  
19 about that. But I just don't see anything that's  
20 extremely relevant about this.

21 There's nothing relevant about -- the fact  
22 that it's not on my 31B doesn't change anything.

23 Q So let me just turn back real quick again  
24 to -- I'm sorry. 30 -- maybe it's on me. 30A and  
25 30B. And what I wanted to do -- I'll just make the

1 simple point and maybe you can agree with me or you  
2 won't. 30A has -- this is the intraday impact  
3 analysis of June 16th.

4 A Okay.

5 Q And the last -- I'm looking at 17, I think  
6 it's Page 184 -- I'm sorry, there's a series of  
7 articles that are -- the last article with the time  
8 stamp on here is 16:44, the Reuters story on  
9 Page 183.

10 A Yes.

11 Q And then there's these additional articles  
12 that we don't have a time stamp for, but they could  
13 have been either published during the day or after  
14 the close, correct?

15 A Yeah. I mean, I suppose -- I'm not sure  
16 how one would figure it out. I suppose in theory  
17 they could be published before the day, before the  
18 trading day started. But they're certainly  
19 published on that day, that's the way they are  
20 dated, but they don't have a time stamp.

21 Q So and then Exhibit 31A, the one we were  
22 just -- I'm sorry. 31B, the one we were just  
23 looking at, you know, discussing the disclosures  
24 over the -- over the weekend and then on June 19th.

25 A Okay.



1 Q So and I just wanted to -- you know, if you  
2 could -- I don't know if you have it, but the  
3 Complaint, which was previously marked as Exhibit 1,  
4 I think it's in the folder. Let me know if I need  
5 to resubmit it.

6 A Exhibit 1, the Complaint?

7 Q Yeah.

8 A All right. I have it.

9 Q Okay. Paragraph 157.

10 A It's revealing itself to me very slowly.  
11 I'm getting there.

12 MR. BLAIR: Hey, Mike.

13 MR. BLATCHLEY: Yeah.

14 MR. BLAIR: We've been going about an hour.  
15 Maybe while he gets there, maybe we take five, ten  
16 minutes.

17 MR. BLATCHLEY: That would be totally fine.

18 THE WITNESS: I'm there right now. Do you  
19 want to just finish this line of questioning and  
20 then we can...

21 BY MR. BLATCHLEY:

22 Q Yeah. Well, this will take -- it's very  
23 short. Paragraph 157, it talks about, the second  
24 sentence, you know, articles published on June 16th  
25 in Ars Technica and CRN.

1 I just wanted to point your, you know,  
2 direction to those two articles, and then just get  
3 you to confirm that neither of those two articles  
4 are mentioned in Exhibits 31A or 30A, the ones that  
5 we were just looking at.

6 A I think you mean 30B.

7 Q I'm sorry. Yeah. 30B and 31B. I'm sorry.  
8 Thank you for that.

9 A I mean, I'll sort of take your word for it  
10 in the sense I certainly don't see the source. But  
11 the topic describe the sources that I used, which is  
12 the Bloomberg sources, so I don't see Ars Technica  
13 or CRN in the source. Whether or not those sources  
14 are looking at other ones is I suppose a different  
15 question, but I'll take your word for it they're not  
16 listed.

17 Q So and I'll just -- again, I'll say those  
18 are not articles included in your Appendix B; is  
19 that right?

20 A I'm not seeing them.

21 Q And so you didn't read those articles in  
22 coming to your conclusions -- or I'm sorry, your  
23 opinions in the report?

24 A Wrong. I'd have to look and see if they're  
25 in my list of docs considered. I mean, you quote

1 parts of them in here and I certainly relied on the  
2 Complaint, but I don't recall specifically -- I'm  
3 not sure if you're -- where exactly you're going  
4 with these in the sense that no specific article  
5 is -- they kind of make or break on any of these  
6 sorts of points here. So I don't see the relevance  
7 of the questions, but I don't see them listed on  
8 30B, so I think that's technically true, I guess.

9 Q I'll make it easy. So it's fair to say you  
10 did not consider those articles in your analysis and  
11 your accompanying discussion referencing  
12 Exhibits 30B and 31B?

13 MR. BLAIR: Object to the form.

14 THE WITNESS: I think I've answered that as  
15 much as I can. I don't see them literally on the  
16 list there. So I think that kind of speaks for  
17 itself in the sense that they're not there.

18 Whether or not they were in some broader  
19 search and then excluded, I don't have any reason to  
20 believe that but I don't know.

21 But I didn't -- to the extent they're not  
22 on the list, obviously in some sense they're not  
23 considered. But neither is any specific article --  
24 I mean, they're considered in their totality and an  
25 illustration of the intraday trading, but it's not

1 as though the particular substance of any of them is  
2 being analyzed for a particular impact on the stock  
3 price. I think that would miss the point.

4 MR. BLATCHLEY: Okay. Should we take our  
5 break?

6 MR. BLAIR: Let's do it.

7 MR. BLATCHLEY: Okay.

8 THE VIDEOGRAPHER: The time is 3:12 p.m.  
9 and we are off the record.

10 (Off the record from 3:12 - 3:30 p.m.)

11 THE VIDEOGRAPHER: All right. The time now  
12 is 3:30 p.m. We are back on the record.

13 BY MR. BLATCHLEY:

14 Q Mr. Deal, can you hear me? I'm sorry.  
15 Just to -- is this okay?

16 A I think so. Can you say something else?  
17 No. Not hearing anything.

18 Q Can you hear me now?

19 A Yes.

20 Q Sorry about that.

21 Mr. Deal, you're aware, and this in your  
22 report, that Dr. Hartzmark is proposing an  
23 out-of-pocket methodology for calculating classified  
24 damages?

25 A Yes.

1 Q And you're familiar with the out-of-pocket  
2 methodology?

3 A Yes.

4 Q Are you aware that it is nearly universally  
5 used to calculate classified damages in securities  
6 fraud cases under Section 10b?

7 A Yes. In the large. My quibble is not with  
8 the idea of an out-of-pocket method. I agree that  
9 that is typically how damages are calculated. It  
10 has to do with everything else we've been talking  
11 about today.

12 That just to say I'm going to use  
13 subtraction and somehow there's going to be  
14 inflation ribbon in my view is not sufficient.

15 Q And, again, you're not proposing to do  
16 damages methodology of your own?

17 A I'm not proposing anything different from  
18 out of pocket as a concept, no.

19 Q And so your criticism here -- and I know  
20 there's a lot in your report, but let me try to boil  
21 it down if I could.

22 One, you say the price decline in the  
23 corrective disclosure dates really can't be used as  
24 a measure of inflation because, I think, of two  
25 reasons, there's no corrective information and this

1 whole FUD concept that you were talking about. Is  
2 that -- is that fair?

3 A I mean, that's -- that's part of it.  
4 That's not all of it.

5 Q Just with respect to the corrective  
6 disclosures.

7 A Right.

8 Q Okay. And then the second --

9 A I'm saying that -- do you want me to -- I'm  
10 happy to give you the full answer if you want,  
11 but...

12 Q Well, just make sure I haven't, you know,  
13 omitted anything you think is important. You know,  
14 I think your other criticism is that that's your  
15 Figure 5 analysis, that there's a lot of  
16 inflationary misstatements that are hard to  
17 quantify, and that's -- again, the term I think you  
18 used a lot today was complexity. Is that -- is that  
19 right?

20 MR. BLAIR: Object to form.

21 THE WITNESS: I agree that there's a lot of  
22 complexity. I've restated many times Dr. Hartzmark  
23 hasn't done anything on the front end to measure  
24 inflation. I agree that there's a lot of complexity  
25 there and we've been over that and I incorporate

1 that into my answer, everything we've talked about  
2 today.

3 Before you leave the corrective  
4 disclosures, it's not just the fact that there's FUD  
5 out there. I think that's a contributing factor to  
6 why we see the drop we see. But even if the drop  
7 were half as big but still statistically significant  
8 and there wasn't any FUD or Wells Fargo, the core  
9 problem of -- it's not actually a disclosure of  
10 factual information from the company. It's still a  
11 core problem and I see that as being a very  
12 important problem in the corrective disclosures.

13 BY MR. BLATCHLEY:

14 Q The other information wasn't corrective; is  
15 that fair? That's your position?

16 A I certainly -- yeah. I think that's right.  
17 Certainly on its face it's not corrective. It's  
18 not -- it's allegations in the lawsuit but on its  
19 face that alone is not corrective information.

20 Q So let me take that. Whether or not the  
21 corrective disclosure dates involve disclosure of  
22 truly corrective information, actual corrective  
23 disclosures I think is the term you used, or were  
24 prompted by FUD, that issue is common to all class  
25 members, right?



1 MR. BLAIR: Object -- objection to the  
2 form.

3 THE WITNESS: If I understand your  
4 question, I think the answer is probably yes in the  
5 sense that with the out-of-pocket type measure, you  
6 are looking at the price of the security that's  
7 faced by all investors.

8 So whether or not there's -- any of those  
9 are corrective disclosures or those price drops can  
10 be considered to be corrective disclosures, that's a  
11 question about the impact on the price specific to  
12 the allegations in the lawsuit that will affect all  
13 investors.

14 I think that's your core question. I don't  
15 think there's, you know, one group of investors in,  
16 you know, California that are going to be  
17 differently affected by a group of investors in  
18 Pennsylvania. I'm using those obviously  
19 conceptually. I agree with that. I think that was  
20 your question.

21 BY MR. BLATCHLEY:

22 Q It was my question. And, again, just to  
23 put it another way, nothing -- none of your  
24 criticisms or any analysis -- I'm sorry.

25 None of your criticisms are directed by any



1 analysis that's unique to any individual class  
2 member?

3 MR. BLAIR: Object to the form.

4 THE WITNESS: Again, I think I would agree  
5 with that in concept. I mean, obviously to the  
6 extent it affects, you know, ribbons, parsing,  
7 scaling, all of those things, any individual will  
8 fall somewhere on there in their ribbon and their  
9 calculation will be unique to their buy day and  
10 their sell day or their hold day. But two people  
11 who otherwise have equal information I think are not  
12 differently situated in terms of the concerns that  
13 I'm raising.

14 BY MR. BLATCHLEY:

15 Q Got it.

16 And so I think you said in your report and  
17 throughout that, you know, I think it's that parsing  
18 and scaling issue is really what you're talking  
19 about and the complexity and the difficulty in doing  
20 that.

21 Is your opinion that that is possible to do  
22 in this case?

23 MR. BLAIR: Object to the form, asked and  
24 answered repeatedly.

25 THE WITNESS: Yeah. Based on what I've

1     seen and my analysis, I don't see how it's possible.  
2     So I think that's the best answer I can give you.

3     BY MR. BLATCHLEY:

4           Q     So it's your opinion then that if this  
5     matter were to proceed to the damages phase,  
6     defendants would not be able to offer a reliable  
7     expert opinion that calculates classified damages?

8           MR. BLAIR:   Object to the form.

9           THE WITNESS:   Given everything that I've  
10    seen and that we've talked about, I don't see how it  
11    can be done.

12    BY MR. BLATCHLEY:

13           Q     Okay.   And you're certainly not going to  
14    offer that opinion, correct?

15           A     I'm going to offer the opinion that I don't  
16    see how it can be done.   I'm not going to offer an  
17    opinion -- I'm not going to calculate -- I have no  
18    plans to calculate the damages ribbon if that's the  
19    question there.   I don't see how that can be done  
20    accurately given the complexity of all the  
21    allegations.

22           MR. BLATCHLEY:   Okay.   Can you -- can you  
23    all give me -- can we go off the record for like two  
24    minutes.

25           MR. BLAIR:   Sure.

1 THE WITNESS: Sure.

2 MR. BLATCHLEY: Thanks. Sorry, all.

3 THE WITNESS: Do you want to -- should we  
4 mute and all that or we can just stay on?

5 MR. BLATCHLEY: Yeah. We can do that.  
6 I'll just take this off. Hold on.

7 THE VIDEOGRAPHER: Okay. So I'll just say  
8 we're off the record at 3:39 p.m.

9 (Off the record from 3:39 - 3:42 p.m.)

10 THE VIDEOGRAPHER: Okay. The time is  
11 3:42 p.m. Back on the record.

12 MR. BLATCHLEY: So, Mr. Deal, again, thank  
13 you so much for all your time today and for doing  
14 the remote deposition. That's -- that's all the  
15 questions I have for now.

16 THE WITNESS: Thank you. I enjoyed it.

17 MR. BLAIR: Mike, I have no follow up.

18 MR. BLATCHLEY: Okay. Great. Thanks so  
19 much, everyone, and I apologize for the delay at the  
20 beginning. We can go off the record, if that's  
21 okay.

22 THE VIDEOGRAPHER: Okay. This concludes  
23 today's testimony given by Bruce Deal. The time is  
24 now 3:42 p.m. We are off the record.

25 \\\

(Whereupon, at 3:42 p.m., the remote deposition of  
BRUCE DEAL was concluded.)

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1 STATE OF CALIFORNIA )  
2 COUNTY OF SAN MATEO ) ss.  
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6 I, the undersigned, hereby certify under  
7 penalty of perjury under the laws of the State of  
8 California that the foregoing testimony is true and  
9 correct.

10 Executed this \_\_\_\_\_ day of  
11 \_\_\_\_\_, 20\_\_\_\_\_, at \_\_\_\_\_,  
12 California.  
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BRUCE DEAL

1 STATE OF CALIFORNIA )  
2 COUNTY OF LOS ANGELES ) ss.  
3

4 I, Kimberly A. Edelen, C.S.R. No. 9042, in and  
5 for the State of California, do hereby certify:

6 That prior to being examined, the witness named  
7 in the foregoing deposition was by me duly sworn to  
8 testify the truth, the whole truth and nothing but  
9 the truth;

10 That said deposition was taken down by me in  
11 shorthand at the time and place therein named, and  
12 thereafter reduced to typewriting under my  
13 direction, and the same is a true, correct and  
14 complete transcript of said proceedings;

15 That if the foregoing pertains to the original  
16 transcript of a deposition in a Federal Case, before  
17 completion of the proceedings, review of the  
18 transcript { } was {X} was not required.

19 I further certify that I am not interested in  
20 the event of the action.

21 Witness my hand this 27th day of April,  
22 2020.

23   
24

25 KIMBERLY A. EDELEN, C.S.R. NO. 9042

## INSTRUCTIONS TO WITNESS

Please read your deposition over carefully and make any necessary corrections. You should state the reason in the appropriate space on the errata sheet for any corrections that are made.

After doing so, please sign the errata sheet and date it.

You are signing same subject to the changes you have noted on the errata sheet, which will be attached to your deposition.

It is imperative that you return the original errata sheet to the deposing attorney within thirty (30) days of receipt of the deposition transcript by you. If you fail to do so, the deposition transcript may be deemed to be accurate and may be used in court.

E R R A T A

I wish to make the following changes,  
for the following reasons:

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BRUCE DEAL

\_\_\_\_\_  
DATE

SUBSCRIBED AND SWORN TO BEFORE  
ME THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 .

\_\_\_\_\_  
NOTARY PUBLIC

\_\_\_\_\_  
COMMISSION EXPIRES